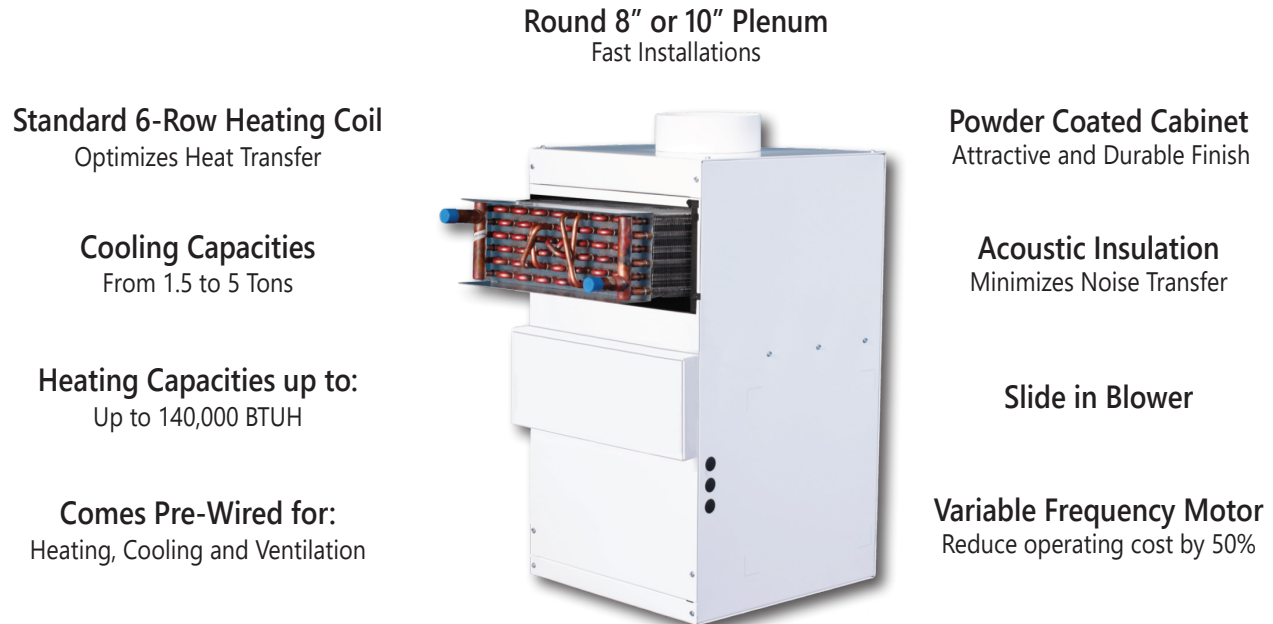


## Frequently Asked Questions

### What are Hi-Velocity Systems?

The Hi-Velocity System is a complete home comfort system. Classified as an SDHV (Small Duct High Velocity System), our high pressure forced air delivery mini duct system can be designed to provide heating, cooling, filtration, ventilation, and dehumidification. The Hi-Velocity System has been pre-engineered and works on the principle of pressure rather than air velocity.



### How does the Hi-Velocity System compare to a Conventional Forced Air System?

Our system is quite different than a conventional furnace, one of the main differences being that the supply branch ducts are **"small diameter"** or **"mini duct"**, which is much more adaptable and does not place the same strict limitations on architects and builders. Our duct can be installed along joists, in between walls, or other confined areas quickly and easily.

With a **pressurized small diameter duct** we condition the air differently than conventional forced air systems. Pressure is created in the smaller supply ducts and converted to velocity at the outlets utilizing the **Venturi Effect**, which eliminates dust build-up within the duct work. With continuous air circulation from the constant fan, airborne dust and other allergens can be easily filtered out of the air. With the use of a high pressure area to low pressure area, we continuously mix the room air, creating even temperatures from floor to ceiling. Equal air flow to all of the outlets results in unmatched air delivery, and a draft free environment that **eliminates hot and cold spots** normally associated with conventional systems.

## Frequently Asked Questions

### What are the Benefits of Hi-Velocity Systems?

Featuring an innovative air handler and unique heating and cooling technologies, the Hi-Velocity System helps create a healthier and more enjoyable indoor living environment, while saving money on monthly utility bills. The Energy Smart Variable Frequency Drive Motor will help save homeowners up to 50% on their monthly operating costs, and the system can be installed in 25% less time than a traditional heating system.



Designing duct layouts is substantially easier because vent outlets no longer need to be located on outside walls. Our flexible two-inch and HE ducts fit inside a typical framed wall without having to disturb the drywall, making it very easy to install inside existing walls with minimal remodelling. Our duct can be installed along joists, in between walls, or other confined areas quickly and easily. Our system is also ideal in new construction because the design of some new homes makes it very difficult to install larger, bulkier duct systems. Our air handlers are modular and fit easily in mechanical rooms, closets, attics, crawlspaces, anywhere! The small footprint makes it the right choice for both new construction and retrofits. When every square foot counts, the Hi-Velocity System is the energy saving solution to all of your heating, cooling and IAQ (Indoor Air Quality) needs.

### How does the Hi-Velocity System address Indoor Air Quality (IAQ)?

The Hi-Velocity System utilizes a constant fan for air delivery which can help eliminate conditions that promote mould and mildew. By controlling your environment with continuous air circulation and moisture control, conditions that will allow these harmful spores the opportunity to take hold are reduced. The Hi-Velocity System can provide humidification, dehumidification, introduce fresh air and be used with high efficiency air filters. A popular add-on to our system, the **Hi-Velocity Air Purification System** provides Photo-Catalytic and UV Technologies, providing consumers unsurpassed indoor air quality.



## Frequently Asked Questions

### Is Zoning a possibility with Hi-Velocity Systems?



Energy Saving Products Ltd. is proud to offer the HE-Z Zoning Ready Air Handlers. HE-Z is unique in the SDHV Industry because it is a true "Energy Saving Zoning Control System", compatible with most forced air zoning packages. The WEG controller is pressure reactive and will change the energy input to maintain constant CFM flow of open outlets from 150 cfm to 1250 cfm, eliminating the need for by-pass dampers.

**HE-Z Air Handlers are now available with multiple collars (2, 3 or 4) with zone controls, dampers and actuators pre-installed.**

### Can the Hi-Velocity System Provide Dehumidification?

The Hi-Velocity System is a complete home comfort system, which can be used for heating, cooling, ventilation, dehumidification, or a combination of all. It is important to maintain the proper humidity levels in your home and workplace. Humidity that is too high will stain ceilings and walls, and can cause paint and wallpaper to peel. It is also a breeding ground for mould, rot and insects such as termites and cockroaches. Our Cooling Modules are highly efficient and very effective at removing moisture from the air. Not only do we cool the air, we also use a lower air velocity which allows the Hi-Velocity System to remove more moisture from the passing air molecules. This can result in a 30% drop in humidity levels, leaving a constant and comfortable temperature on the skin surface.



### What kind of sound levels can I expect from the Hi-Velocity System?

When designed and installed correctly, the noise level on the Hi-Velocity System is equal or less than a conventional system.



### What types of Thermostats can be used?

Most 24 volt thermostats can be used with the Hi-Velocity System. Our unique control board makes wiring the thermostat to the air handler quick and easy.

## Frequently Asked Questions

### What types of Applications can the Hi-Velocity System work in?

The Hi-Velocity System can be utilized for most projects, but some typical installations are commercial, multi-family, new housing construction and the retrofit market. With the versatility, quick installation and superior Indoor Air Quality provided from our systems, they are now a popular choice with home builders, installers and the end user.



New  
Construction

Whether it is your first house or your dream home, the Hi-Velocity System is the right choice for cooling and heating. Don't reduce your livable area with large duct runs when small round plenum and flexible ducts can be run through floors, walls and ceilings. Not only will you improve your living standards with the Hi-Velocity System, you'll save space allowing you to enjoy your new home that much more.



Multi-Family

Many home builders and building contractors are utilizing our specially designed Builders Series for multi-family structures. This cost-effective air handler can be ordered for large projects at a discounted price. Units come with an unpainted galvanized steel casing, and can come with or without zoning controls. With the adaptability of this unit, builders can save hundreds of hours of installation time on a single multi-family project.



Retrofit

The retrofit market is booming with people buying beautiful older homes and updating them to today's standards. In older homes upgrading the heating and cooling system, there is no better choice than the Hi-Velocity System. The small ducts are easy to pull through walls, floors and ceilings with very little changes to the existing structure.



Commercial

In commercial applications, exposed plenum with drilled outlets is the ideal choice. Drilled outlets are commonly used to supply a large area with heating and cooling. They can also create a pressurized air curtain for bay doors or large openings to the outside environment.



## Frequently Asked Questions

### What size of Hi-Velocity System do I require?

It is recommended that an accurate room to room heat loss/gain is performed on the structure to ensure the correct size of unit is selected. Contact us to discuss your plans and sizing options.

### Where is the best location for the Hi-Velocity Air Handler?

The flexibility of the Hi-Velocity System allows the air handler to be located in attics, basements, crawl spaces and closets.



## Frequently Asked Questions

### What styles of Vent Plates are available?

Our vent plates are available in many attractive finishes, in compositions of plastic, metal, and wood which can be finished, painted or stained to match their surroundings.



White Plastic



Stainless Steel



Silver Vein



Copper Vein



Black Wrinkle

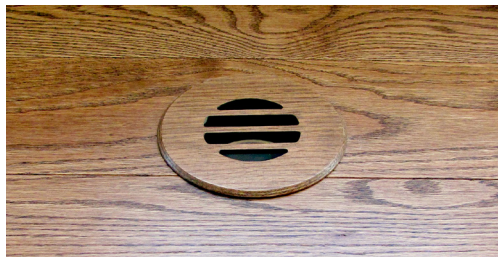


Unfinished Oak

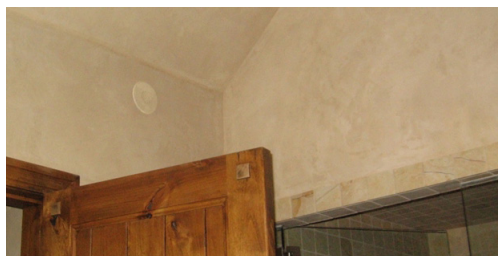


Unfinished Maple

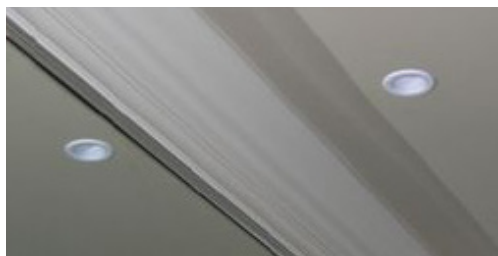
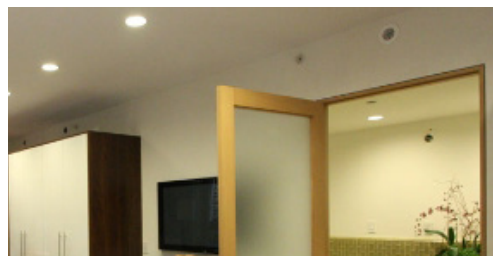
### Where should Vent Outlets be located?



Our Vent Plates  
can be located  
in Floors...



Walls...



Ceilings...



Anywhere!!





## Frequently Asked Questions

### What options are available for Heating/Cooling?

The HVS Series Variable Speed Heat Pump, available in 2, 3 or 5 Ton sizes, uses less energy than a conventional heat pump by modulating the compressor/fan speed up or down to match load. Inverter Drive technology allows for capacity modulation as low as 20%. The Variable Speed Compressor allows for zoning with true efficiency, while greatly reducing noise. Side discharge design fits tight spaces. Matches easily with our Hi-Velocity System or 3rd party air handlers.



HVS-24

HVS-36

HVS-60

For heating, any 3rd party Boilers, Dual Purpose Hot Water Heaters, Heat Pumps, and Geothermal Systems can be used as heat sources with our coils. We also manufacture a Slide-In Electric Module for the system, that is easily installed without any external mounting or duct work required.

For cooling, any 3rd party Chillers, Condensing Units, Geothermal Systems, and Heat Pumps can all be used as cooling sources with our coils. The high pressure distribution network cools each level of a structure evenly. Use of a lower CFM across our cooling coils ensures a larger amount of humidity is removed from the air, for increased comfort.



## Frequently Asked Questions

### What types of filters can be used on the Hi-Velocity System?

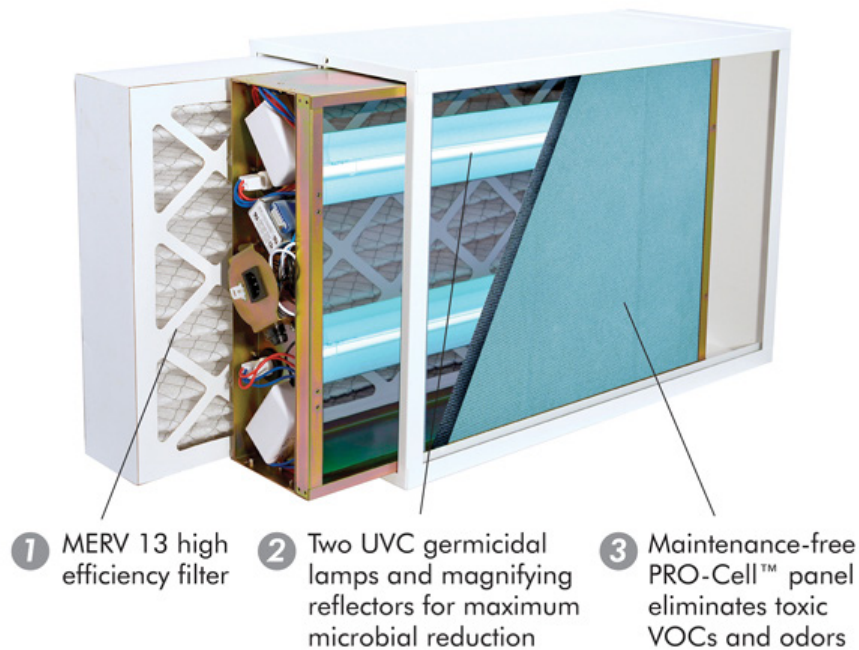
Most filters on the market today can be matched to the units, including media filters, electronic filters and HEPA filters. Our standard filter rack includes a 1" self-sealing moisture resistant Merv 3 filter in sizes to match any air handler.

Also available, our one-size fits-all HE PS Hi-Velocity Air Purification System offers photo-catalytic and UV technologies, giving home and business owners unsurpassed Indoor Air Quality.



*The* **Hi-Velocity**  
*Air Purification System*

*Three Powerful Technologies in One Air Purification System*



### Can additional components such as humidifiers and HRV/ERV's be added?

Various types of humidifiers and HRV/ERV's can be easily added to the unit.





## Frequently Asked Questions

### Can the Hi-Velocity System work with my existing air ducts?

The Hi-Velocity System is designed to use small diameter ducts and will not operate correctly with larger duct systems. However, our **LV-Z Series Air Handlers** are designed to work in place of a conventional system, utilizing existing duct in the home. Perfect for new construction or retrofit applications, the LV-Z Series utilizes highly efficient Variable Frequency Drive Technology, and is easily installed to save time and money on renovations. Field programmable to maintain a constant airflow while using only the amount of energy needed, the LV-Z System can save you time, money, and energy.



LV-Z 1050 H



LV-Z 1750 H

### What about Space Heating and Fresh-Air Makeup?



CU-31



CU-51

Our CUBE Series was designed for specialty applications to provide smaller areas with space heating, cooling and fresh air make-up; Can also be used as a stand alone central exhaust ventilator system.

Ideal for areas such as sun rooms, basements, garages, foyers, and even small homes/apartments.

### How long is the Warranty\*?

A **Five (5) Year Limited Warranty** is extended on all components in products manufactured exclusively by Energy Saving Products. These components include Motors, WEG Controller, Circuit Boards, Dampers, Zoning Controls, Blowers, Motor & Blower Assemblies, Heating Coils, Chilled Water Coils, and Air Conditioning Coils. Note: If any product is installed in or exposed to a corrosive environment, warranty will be void.

A **Three (3) Year Limited Warranty** is extended on Electric Strip Heaters.

A **One (1) Year Limited Warranty** is extended on replacement parts. Products sold by Energy Saving Products but manufactured by others, will carry the original manufacturer's warranty.

\*Refer to the Hi-Velocity Installation Manual for complete warranty terms

Energy Saving Products Ltd, established in 1983, manufactures the Hi-Velocity Systems™ product line for residential, commercial and multi-family markets. Our facilities house Administration, Sales, Design, Manufacturing, as well as Research & Development complete with an in-house test lab. Energy Saving Products prides itself on Customer Service and provides design services and contractor support.

For all of your Heating, Cooling and Indoor Air Quality needs, the Hi-Velocity System is the right choice for you!



Small Duct Heating, Cooling and IAQ Systems

## Build Smart, Breathe *Easy*

Hi-Velocity HE-Z Air Handlers, **Green** Technology



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