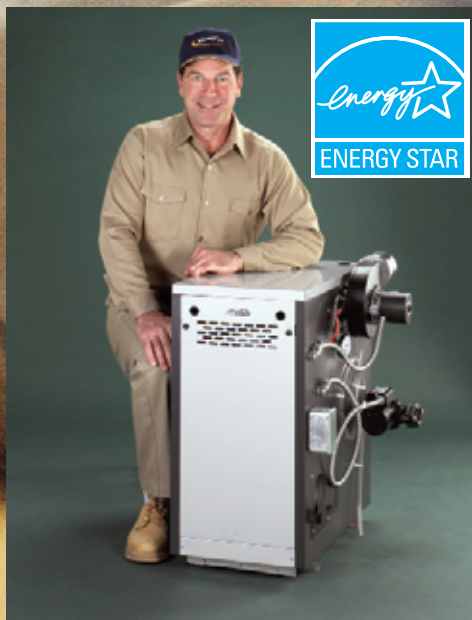


*Slant/Fin*<sup>®</sup>

# VICTORY VSPH

Cast-iron sealed combustion, direct vent gas boiler



**THE PERFECT CHOICE FOR  
NEW RESIDENTIAL CONSTRUCTION  
RELIABILITY AND ECONOMY.**

*Slant/Fin*  
**VICTORY VSPH**  
SEALED COMBUSTION, DIRECT VENT GAS BOILER

## Modern home heating

with the safety, comfort and versatility of sealed combustion.

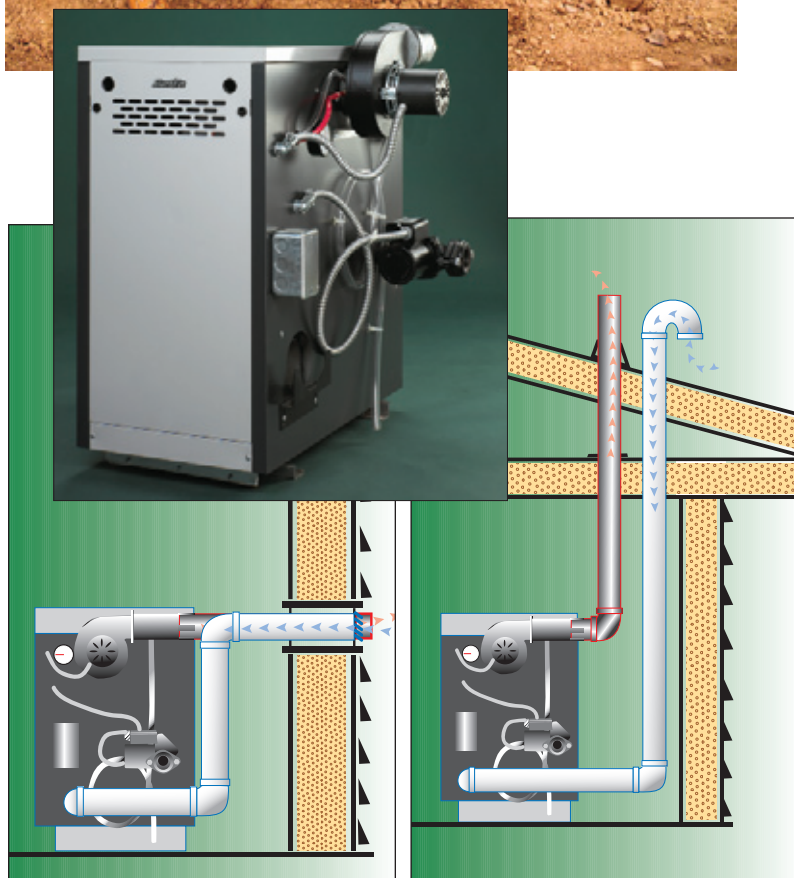
- Economically priced
- No chimney required
- Operates in total isolation from household air. Outdoor air used for combustion.
- Reliable, advanced design, high efficiency cast-iron heat exchanger
- AFUE to 86.1%—saves energy
- Energy Star qualified
- Near zero CO emissions
- Five sizes—17,600 W to 52,800 W (60,000 to 180,000 Btuh) CGA input

## A smart choice for homebuilders

### Venting versatility—no chimney required

The sealed combustion Victory VSPH boiler does not require a chimney. It fits easily in a closet size space and may be vented directly through a wall. Since it draws combustion air directly from the outdoors, its fresh air requirements will not interfere with interior design. It's ideal for homes, apartments, condominiums and any application where a chimney may not be practical or where an old chimney has deteriorated. It saves construction costs and allows more living space. A wide variety of options permit you to select the most practical and economical venting method. Consult installation instructions for complete details.

*The Victory VSPH boiler operates in total isolation from household air. The combustion process is "sealed" inside the boiler, with intake air and exhaust pipes connected directly to the outdoors. Venting may be through the wall or through the roof (far right).*



## Comfort and peace of mind for your family

Heat your home with confidence with a modern new Victory VSPH boiler from Slant/Fin. High efficiency operation keeps fuel costs low. And its sealed combustion design gives you remarkable comfort, safety and peace of mind. The Victory VSPH runs so quietly, you will hardly know it's on, even if it is located near your living area. When installed with an optional Slant/Fin indirect water heater, you can also enjoy abundant hot water for your kitchen, bath and laundry.

## Sealed combustion makes your home more comfortable

Your home will be more comfortable with a Victory VSPH boiler because it does not use household air for combustion. Two 76 mm (3-inch) pipes connect the boiler through an exterior wall to the outdoors. One pipe draws in fresh outside air for combustion while the other expels exhaust directly to the outdoors, without ever disrupting the comfort of your living area. An ordinary natural draft boiler typically draws .56 to 1.7 m<sup>3</sup> (20 to 60 cubic feet) of warm household air per minute from your living areas. This air is replaced by cold outside air that is literally sucked in through tiny cracks and openings around doors, windows and elsewhere. This makes you chilly and causes your boiler to run longer, resulting in higher fuel bills. The Victory VSPH boiler's combustion process is totally isolated from the air in your home. A properly installed system has no open flame and no vent system component that permits exhaust or flame to "back up" into the house. When the alternative non-direct venting method is chosen, inside air is used for combustion.

## Cast-iron design for proven long life and reliability

The Victory VSPH is Canada's best built sealed combustion gas boiler -- backed by a lifetime limited warranty. Cast-iron is recognized by heating professionals everywhere as the longest lasting, most durable heat exchanger material. Boilers made with stainless steel, aluminum or copper are typically more prone to service problems and, reflecting their relatively short life expectancy, generally carry a much shorter warranty.

## High efficiency keeps fuel costs low

All Victory VSPH models have been awarded Energy Star certification for their fuel saving performance. With AFUE to 86.1%, Victory VSPH provides high efficiency heating that will keep fuel costs low. A new Victory VSPH boiler can save 30% or more compared to a typical old boiler operating at 60% efficiency.



*Ordinary boilers consume warm household air which causes infiltration of chilly outdoor air to replace it.*



# Victory VSPH

**Built for performance and reliability**

## Advanced design cast-iron heat exchanger extends boiler life

The cast-iron boiler sections are produced on state-of-the-art computerized machining centers to extremely critical tolerances. Superior heat transfer properties permit use of smaller, more compact heat exchanger sections. The flue passage design, thermal pin pattern and consistent wall thickness ensure uniform heat transfer with less thermal strain and metal fatigue.

## Avoid leaks with durable metal push nipples

Only metal push nipples are used to join the cast-iron sections. These push nipples expand and contract uniformly with the cast-iron sections for superior, leak-free performance and longer life. In many ordinary boilers, cheaper rubber or plastic gaskets are substituted for metal push nipples and could deteriorate and leak.

## Speedy, self-sealing vent connection

Flue connector has an integral seal that is compatible with Saf-T Vent EZ Seal® vent components. Integral seals speed vent installation. With EZ Seal components, no RTV sealant and no curing time are required, so the boiler may be started immediately. EZ Seal vent components won't seat incorrectly, so you reduce the risk of accidental flue gas or condensate leakage. For use of other vent component brands, see installation instructions. Air intake utilizes PVC or galvanized pipe.

## Unitized air intake-vent terminal

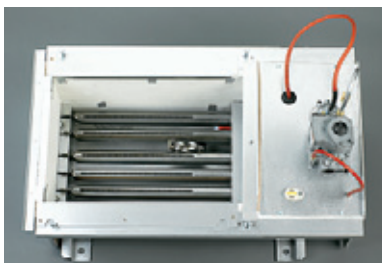
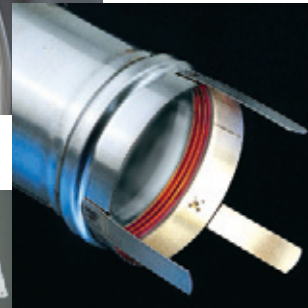
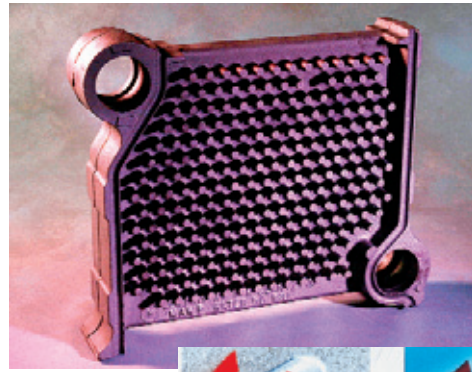
Designed specifically for use with the Victory VSPH boiler, the combination air intake-vent terminal is versatile and attractive. It fits walls from 89 mm to 305 mm (3½" to 12") thick. Included with every boiler.

## Integrated boiler control optimizes boiler performance

The electronic control was designed specifically to optimize the operation of the Victory VSPH boiler. It monitors the status of boiler components and controls the sequence of operation, including pre- and post-purge periods, trial for ignition and lock-out. Five indicator lights verify normal operation and provide diagnostic information when flashing.

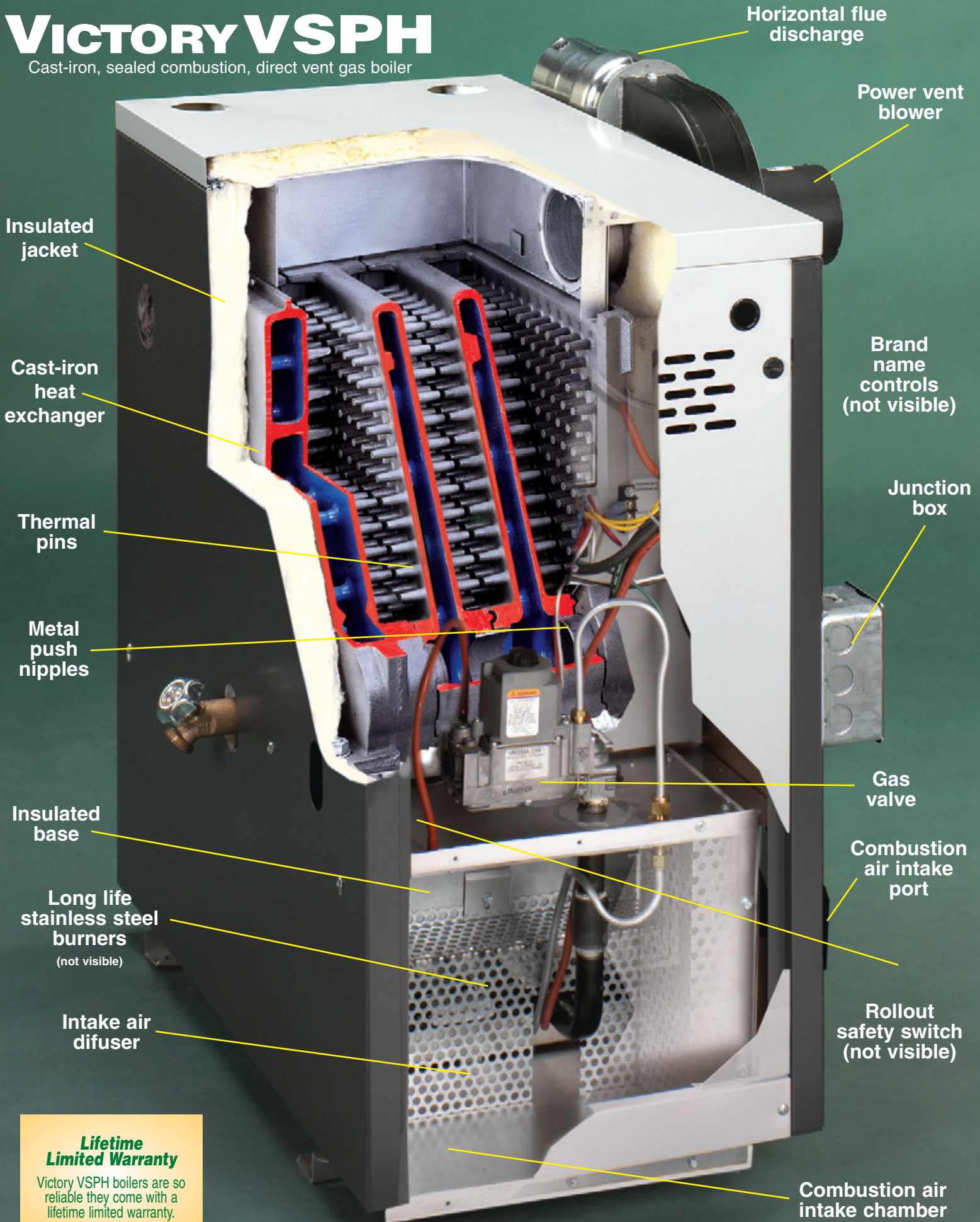
## Increased efficiency with insulated base assembly

The Victory VSPH base assembly is constructed of heavy gauge aluminized steel. Thick refractory insulation surrounds the combustion chamber, increasing efficiency. One piece stainless steel burners with special port construction resist flame lift and flashback.



# VICTORY VSPH

Cast-iron, sealed combustion, direct vent gas boiler



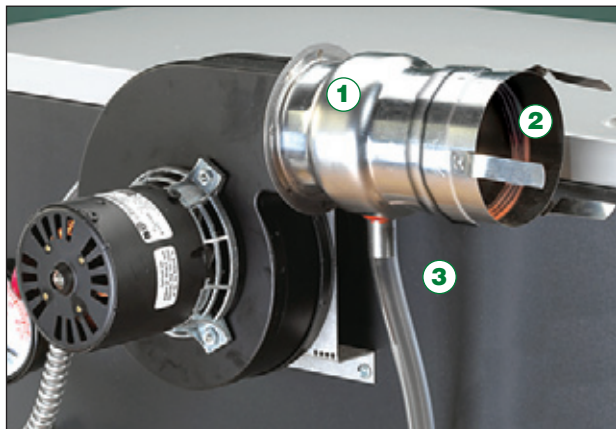
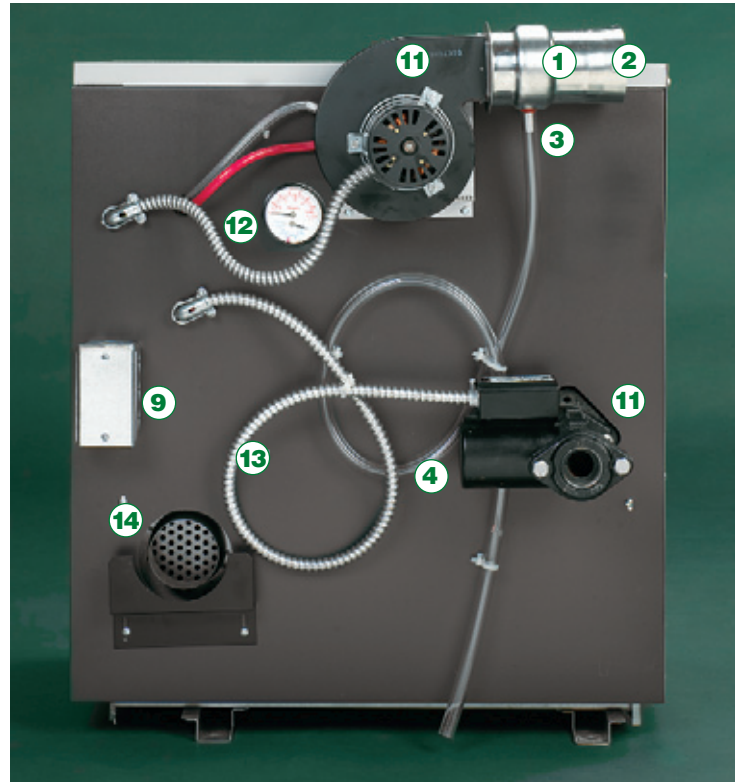
## **Lifetime Limited Warranty**

Victory VSPH boilers are so reliable they come with a lifetime limited warranty.

# Installer-friendly features speed installation and service

The Victory VSPH boiler installs anywhere with access to an outside wall or roof for venting -- basement, utility closet or even a garage. Since it does not require a chimney, it's ideal for replacements when an old chimney is inadequate or in need of repair. It's engineered with installer friendly features to speed installation and service:

- ① **Horizontal flue discharge components** are factory installed to save field assembly.
- ② **76 mm (3-inch) flue connector** with integral adapter for easy connection to stainless steel venting. Integral self-seal when used with EZ Seal components.
- ③ **Condensate drain** is built into the flue discharge assembly.
- ④ **Drain tube** for condensate is factory installed and pre-configured with water trap.
- ⑤ **Quick connect wiring** speeds service, prevents miswiring.
- ⑥ **Integrated boiler control with built-in diagnostics** engineered by Slant/Fin to optimize VSPH boiler operation. Diagnostic indicator lights speed troubleshooting.
- ⑦ **Intermittent pilot spark ignition** saves energy.
- ⑧ **Field convertible gas valve** for natural-to-propane gas.
- ⑨ **Junction box** for line voltage facilitates wiring of shut-off switch.
- ⑩ **Pressure switch** functions at all altitudes.
- ⑪ **Controls, circulator pump, inducer** and other "trim" are top quality brand names that are widely available to heating professionals and easy to service.
- ⑫ **Pressure-temperature gauge** located for easy viewing.
- ⑬ **Circulator harness** is long enough for supply or return mounting.
- ⑭ **76 mm (3-inch) combustion air intake connector** for PVC or galvanized pipe.



*Condensate drain is built into flue discharge assembly.*



*Easy to access up-front controls. Lift-off front cover.*

# VICTORY VSPH™

SEALED COMBUSTION GAS BOILER

## Ratings

### RATINGS FOR NATURAL AND L.P. GAS

MODEL NO.	RATINGS FOR WATER				NET RATING WATER†		WATER‡		EFFICIENCY (A.F.U.E.)
	CSA INPUT		GROSS OUTPUT		W	Btuh	m²	Sq. ft.	
	W	Btuh	W	Btuh					
VSPH-60	17 600	60,000	15 200	52,000	13 200	45,000	28	300	86.1%
VSPH-90	26 400	90,000	22 900	78,000	19 900	68,000	42	453	85.7%
VSPH-120	35 200	120,000	30 200	103,000	26 400	90,000	56	600	85.5%
VSPH-150	44 000	150,000	37 500	128,000	32 500	111,000	69	740	85.2%
VSPH-180	52 800	180,000	45 100	154,000	39 300	134,000	83	893	85.1%



CANADIAN ENERGY PERFORMANCE VERIFIED  
RENDEMENT ÉNERGETIQUE VÉRIFIÉ  
EP99006531

### MAXIMUM EQUIVALENT FLUE LENGTH

VSPH-60, 90 & 120: 12 m (40 ft.)  
VSPH-150: 10.7 m (35 ft.)  
VSPH-180: 10 m (33 ft.)  
May differ for certain vent system manufacturers and altitudes. Vent terminal does not effect calculation of total equivalent length.  
See installation instructions, Pub. VSPH-40.

† Ratings must be reduced by 10% over 610 m (2000 feet) elevation. Net ratings shown include allowance from normal piping loss and pick-up load. For installations having unusual piping and pick-up requirements, additional allowances should be made before selecting the size of boiler required. Ratings are based on a piping and pick-up factor 1.15.

‡ Based on heat emission rate of 473 W/m² (150 Btu per square foot).

Note: All boilers are tested and rated for capacity to meet or surpass Canadian minimum A.F.U.E. requirements.

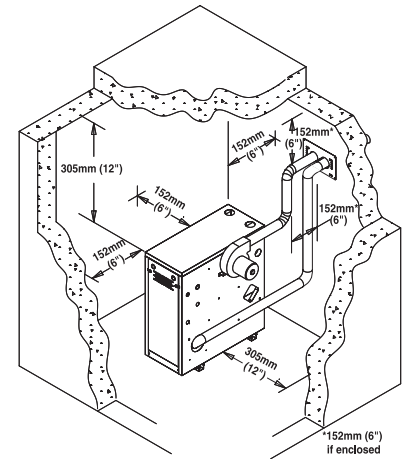
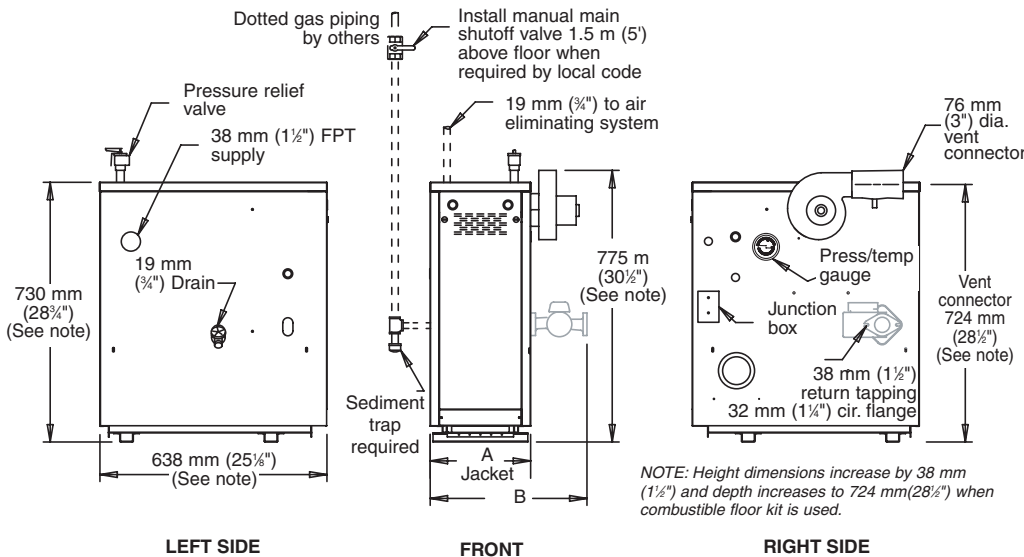
## Equipment

“P”- **PACKAGED WATER BOILER** includes pre-assembled cast-iron heat exchanger with built-in air eliminator, base, pre-assembled insulated flush jacket, gas burners, gas orifices and manifold assembly, combination gas valve, including manual shut-off, pressure regulator and pilot adjustment, integrated boiler control with built-in diagnostics, electronic intermittent pilot ignition system, pressure and temperature gauge, pressure relief valve (ASME), circulator 32 mm (1-1/4”), drain cock, inducer assembly, air flow

proving switch, built-in condensate drain, trap and stainless steel vent pipe adapter, unitized vent/air intake terminal, rollout safety switch. For propane, specify when ordering.

**OPTIONAL EQUIPMENT:** Circulator. Combustible floor kit. AL 29-4C<sup>▲</sup> stainless steel venting material.

## Dimensions



### Victory VSPH boiler minimum clearances for combustibles construction

(See installation instructions for further details.)

Dimensions	VSPH-60		VSPH-90		VSPH-120		VSPH-150		VSPH-180	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
"A"	283	11 1/8"	359	14 1/8"	435	17 1/8"	511	20 1/8"	587	23 1/8"
"B"	441	17 3/8"	518	20 3/8"	594	23 3/8"	670	26 3/8"	746	29 3/8"

Supply water tapping	38 mm (1 1/2")	Gas tapping, natural or propane	13 mm (1/2")
Circulator return flange*	32 mm (1 1/4")		

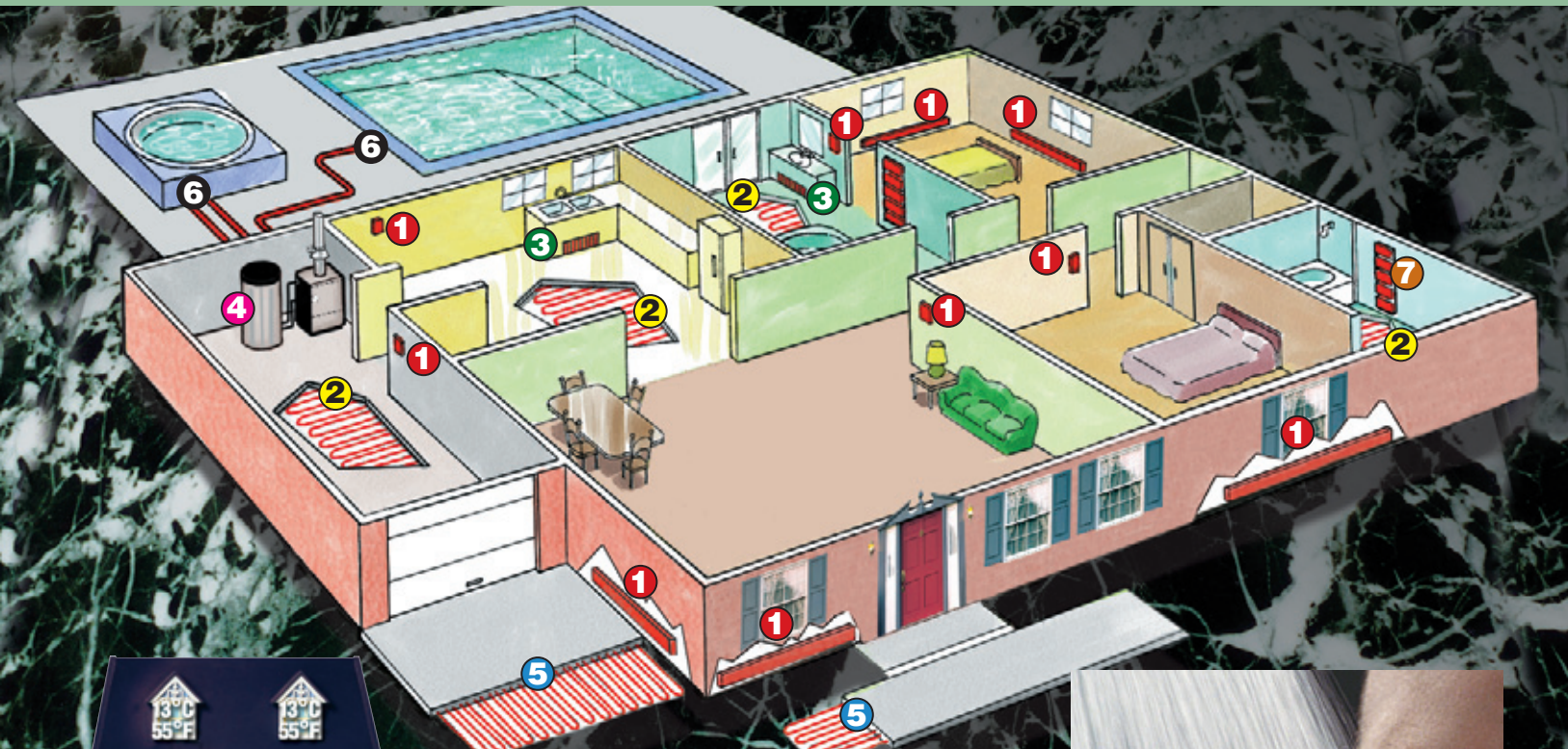
▲ AL 29-4C is a registered trademark of Allegheny Ludlum Corp.

\*When not equipped with circulator, boiler 38 mm (1 1/2") return tapping.

# Make your house a more comfortable home

With a Victory VSPH boiler at the heart of your heating system, you can enjoy deluxe heating comfort all around your home. A Victory VSPH boiler can be installed to provide heating energy for any or all of these hydronic heating systems:

- 1 Zone heating with Slant/Fin hot water baseboard and individual room temperature controls.
- 2 Warm floors with Terra Therma radiant heating by Slant/Fin.
- 3 Slant/Fin hot water fan-convection heaters under cabinets or stairs.
- 4 Hot water with a high volume Slant/Fin indirect-fired water heater.
- 5 Snow melting for driveway and sidewalks with Terra Therma radiant tubing.
- 6 Pool or spa water heating with a Slant/Fin boiler and external heat exchanger.
- 7 Warm, safe heating for bathrooms with Harmony Series towel warmers.



## Zone your heating system for even greater fuel savings.

By dividing your home into separate heating zones, you can save energy by heating only those areas you're using. Depending on your existing piping arrangement, it may be quite simple to zone your system.

## More hot water for your kitchen, bath and laundry.

For a large reserve of hot water for your family all year long, your installer can provide a Slant/Fin Model WH indirect-fired water heater. It's connected just like a heating zone to the Victory VSPH boiler and will store between 114 L and 303 L (30 and 80 U.S. gallons) of hot water. Tapping the boiler's heating capacity, the Slant/Fin water heater offers far better efficiency, faster recovery and longer life than an ordinary direct-fired water heater. The 151 L (40 gallon) model, for instance, delivers 738 L (195 gallons) of hot water per hour!



# Slant/Fin®

SLANT/FIN LTD/TEE, 6450 Northham Drive, Mississauga, ON L4V 1H9  
Phone: (905) 677-8400 Fax: (905) 677-1829 Order Desk Fax: (905) 677-9015  
www.slantfin.ca E-mail: orderdesk@slantfin.ca info@slantfin.ca