

High-Efficient Direct Vent Wall Furnace



80%+ Efficient
20,000, 40,000 and 55,000 Btu Models



DV-40E Shown

U.S. Patent No. 5,644,555

- Utilizes State-of-the-Art Technology for Added Fuel Efficiency
- Electronic Thermistor Thermostat Monitors Furnace Operation
- Optional Wall Thermostat Hook-up is Standard and Will Accept Any 24-Volt Wall Thermostat You Choose
- Total Comfort for a Fraction of the Cost of Electric Heat
- Sealed Combustion Maintains Indoor Air Quality
- Complete with Blower for Proper Circulation and Even Distribution of Heat
- Standard Unit Vents Through a Wall up to 10" Deep (Extended Horizontal and Vertical Vent Runs Available as Accessories for 20,000 and 40,000 Btu Heaters)
- Hot Surface Ignition
- Three Btu Sizes to Heat Any Space
- Peace of Mind Safety Features Built into Furnace
- Mobile Home Certified

Surround Yourself With Comfort



Empire® Hi
Direct Vent V

Inner Beauty Comes Standard On These Great Looking Heaters:

With sleek, slimline designs, soft corners and light grey finish, all three models blend in perfectly with any decor.



- **Attractive Styling With Ease of Use**

The Empire High-Efficient DV-20E (20,000 Btu), DV-40E (40,000 Btu) and DV-55E (55,000 Btu) heaters' attractive styling gives any room a contemporary look. Space-efficient and easy to use, the unique



design makes them cool to the touch, meeting or exceeding all American National Standards Institute temperature tests. A top-mounted control compartment allows you to simply flip the switch to "on" and turn to your desired temperature.

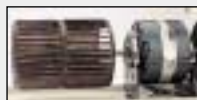
- **More Efficient Heating Means More Savings**

Gas can heat your home for a fraction of the cost of electric heat, and advanced gas heating technology makes these heaters 80+% efficient. Empire Comfort Systems' High-Efficient Direct Vent Wall Heaters are available in the widest range of heating sizes to fit your special needs. The 20,000 Btu DV-20E is ideal for heating basements, family rooms or a combination of small rooms. The 40,000 Btu DV-40E and 55,000 Btu DV-55E are perfect for heating large family rooms, offices, apartments or even entire homes. All three models can be converted from either LP or natural gas and easily warm rooms up to 2,000 sq. feet. With the largest cfm (cubic feet/minute) fans in the industry, these furnaces are also the most effective units at delivering the warmth you desire. The 350 cfm fan in the DV-20E and DV-40E is unmatched, while the DV-55E's 400 cfm fan delivers all the quiet, efficient heat you need. An electronic thermistor thermostat is standard on all models, keeping your room within plus or minus 1° of your selected temperature. Add up all these features, and you get more savings than you'd get with a conventional heater.

High-Efficient Wall Furnaces

Surround Yourself With Comfort

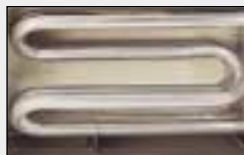
Dual Circulation Blowers force air around the heat exchanger and out the bottom louvers at floor level.



Embossed Steel Outer Casing with durable powder paint finish resists finger prints and stays cool to the touch.



Tubular Heat Exchanger provides a combustion passageway while extracting 80+% heat from gas.



Electronically Controlled Hot Surface Ignitor assures consistent and quiet ignition.



Inshot Burners facilitate smooth operation.



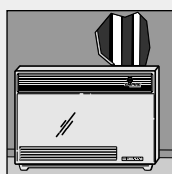
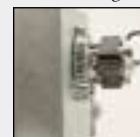
Control Compartment features an electronic thermistor sensing thermostat.



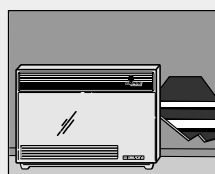
Electronic Circuit Board controls automatic ignition, circulating air blowers, fan inducer run time and operates on-board diagnostics.



Electronically Controlled Fan Inducer works with inshot burners to pull outside air into the tubular heat exchanger.



DV-40E With Optional Vertical Venting



DV-40E With Optional Horizontal Venting

Simplified Venting By Empire

Empire High-Efficient Heaters offer more flexibility than most direct vent heaters. They can be installed on virtually any wall, as well as in any basement. Outside wall installation is simple and only requires silicone adhesive caulking around air inlet tube. Each heater comes with one standard vent terminal for walls up to 10" thick, and venting options are available for walls up to 32" thick.

Every DV-20E, DV-40E and DV-55E comes complete with a standard through-the-wall installation kit. For extended runs, vent options of 15' with a maximum of two elbows or 10' runs with three elbows are available on DV-20E and DV-40E.

- **Direct Venting Means More Efficient Heat**

The energy-efficient method for heating your home actually starts outside. A state-of-the-art heat inducer pulls outside air into the burner compartment and then pushes the same air, now heated, through the unique tubular heat exchanger. A dual, centrifugal fan, air circulation system then blows room air across the tubular combustion chamber. This counterflow action starts at the top of the unit and exits at floor level. Since no room air is used for combustion, you'll enjoy cleaner, healthier and warmer heat.

- **Built-In Safety**

Safety is the most important thing we build into every Empire High-Efficient Heater. All three models feature a state-of-the-art electronic circuit board that monitors furnace operation and controls all on-board diagnostics. They also have an automatic shut-off valve. In the event of a power outage, the heaters will automatically restart when power returns.

- **Simplified Diagnosis and Maintenance**

Each heater features a green LED light in the control compartment that provides easy diagnosis by service personnel.

- **Empire's Unmatched Warranty**

It only makes sense that we'd back these superior heaters with a superior warranty. These high-efficient heaters are guaranteed by a warranty that's unmatched in the industry. The combustion chamber carries a 10-year limited warranty and all other parts carry a 5-year limited warranty with a 2-year limited labor warranty.



Specifications

Model	DV-20E	DV-40E	DV-55E
Color: Cabinet and Front Panels	Light Grey	Light Grey	Light Grey
Btu Input	20,000	40,000	55,000
Btu Output	16,300	32,600	44,825
Overall Dimensions			
Width	37"	37"	37"
Depth	15 3/4"	15 3/4"	15 3/4"
Height	26"	26"	26"
Shipping Weight, Lbs. (One Carton)	128	135	146
Temperature Control			
Electronic Control	Yes	Yes	Yes
Blower, tangential type, one speed	350 cfm	350 cfm	400 cfm
Minimum Clearance to Combustible From:			
Top	10"	10"	10"
Each Side			
Left Side	3"	3"	3"
Right Side*	3"	3"	3"
*Note: 10" Right Side Clearance Suggested for Serviceability of Right Side Panel Area.			
Bottom of Unit to Floor Covering	0"	0"	0"
Gas Inlet			
Type of Gas (State on Order)	Natural or LP	Natural or LP	Natural or LP
Iron Pipe Size (N.P.T.)	1/2"	1/2"	1/2"
Venting			
Wall Depth			
Minimum	2"	2"	2"
Maximum	10"	10"	10"
See accessories for thicker walls.			
Vent Opening in Wall	3 3/4"	3 3/4"	3 3/4"
Venting Options			
Maximum Length			
15' with 2 Elbows	Yes	Yes	No
10' with 3 Elbows	Yes	Yes	No
Note: Intake/exhaust extensions may be used in combination to a maximum of 15 ft. in length and two elbows.			
Accessories (State on Order)			
Intake/Exhaust Extension Kits:			
54" Kit with 2 Elbows	DVE-1	DVE-1	N/A
54" Kit for Extended Vent Runs	DVE-2	DVE-2	N/A
Extended Vent Terminal*	DVT-2	DVT-2	DVT-2
*Standard vent terminal for wall up to 10" thick is included with unit.			
Floor Pad	DVP-1	DVP-1	DVP-1
24-Volt Thermostat	R-633	R-633	R-633

Safety Controls

Automatic Shut-off for Main Burner
Over Temperature Safety Limit Switch

Warranty

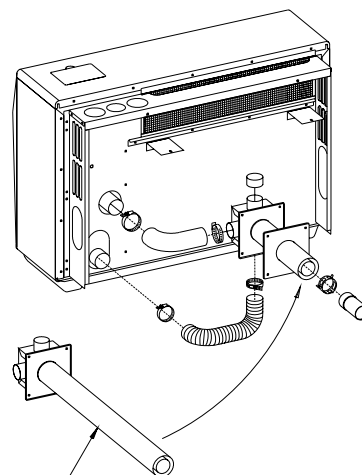
Combustion chamber carries a 10-year limited warranty.
All other parts carry a 5-year limited warranty with a 2-year limited labor warranty.

Note: Empire has a policy of constantly improving quality and performance of its appliances, therefore, materials and specifications are subject to change without notice.

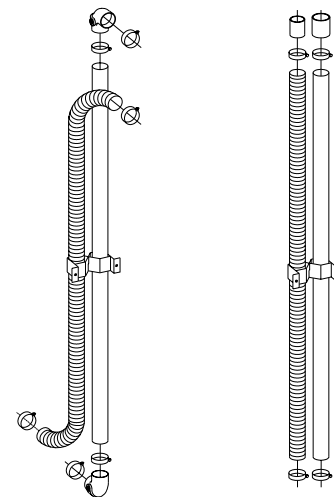


Standard Concentric Vent

Standard Intake/Exhaust Venting
for up to 10" thick wall.



DVT-2, EXTENDED VENT TERMINAL
Replaces standard vent assembly
for up to 32" thick maximum wall.



**DVE-1
Extension Kit**
54" in length with 2
elbows, for vertical
or horizontal runs.

**DVE-2
Extension Kit**
54" in length, use with
DVE-1 kit for vent runs
in excess of 54".

Please Note: DVE-1 and DVE-2 are not available for DV-55E.

For Your Safety

Installation and repair should be done by a qualified service person.

This series is design certified in accordance with American National Standards Institute Z21.86 (latest standard) and the National Standard of Canada CSA 2.32 (latest standard) by the American Gas Association and the Canadian Gas Association as a Fan Type Direct Vent Wall Furnace.

The installation must conform to local codes. In the absence of local codes, the installation must conform with American National Standard (National Fuel Gas Code) known as NFPA 54 and ANSI Z223.1 (latest edition) available from the American National Standards Institute, Inc., 11 West 42nd St., New York, N.Y. 10036, or from the National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts 02269.



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