Season after season, whatever the weather. *Cut your heat and hot water fuel bills more!*

Study: Save up to 40% off fuel bills with heat and hot water boiler upgrades!

See the chart on page 3

SYSTEM 2000®

Multi-Fuel

Frontier and Stackable models

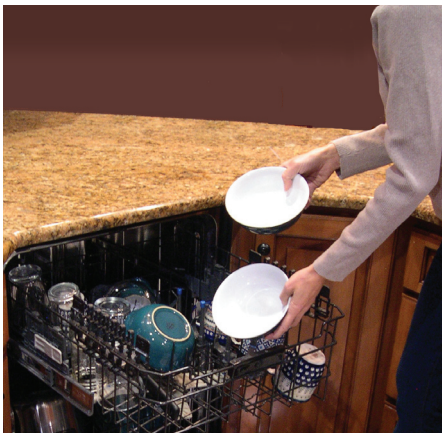
Your heat and hot water system is a *lifetime investment.* Take time right now to learn why System 2000, the *hybrid heating system, is right for you!*[1]

IMPORTANT INFORMATION ABOUT THE COST OF HOT WATER FOR HOME USE:

How much hot water does your family use?

Believe it or not, for baths, showers, laundry and kitchen, etc. an average family uses 64 gallons of hot water *every day.* Sometimes that's too much for a typical boiler to produce. But System 2000 makes as much as ***8 times*** ***more hot water than an electric water heater,*** and ***3 to 4 times*** more than a typical gas water heater. Since ***producing hot water represents 1/3 of a typical home's total heating cost,*** it's ***very*** important to make it as efficiently as possible.

Laundry: 15 gallons per load



The dishes: 10 gallons per load

Taking a shower: 20 gallons per shower

Hot tub or pool: can be hundreds of gallons

System 2000 provides abundant hot water at *significant* savings.

Because System 2000 is an integrated system,[1] with Hybrid Energy Recovery,® it can produce tremendous amounts of hot water for far less cost than conventional boilers. ***System 2000 produces enough hot water to run the dishwasher, the washing machine and several showers all at once.***

System 2000 does it by combining three high performance components: a high capacity hot water storage tank, a low mass high efficiency boiler that produces more hot water per hour, and a Hybrid Energy Recovery system to optimize performance and comfort.

[1] System 2000 is an *integrated* hybid heating system with a high performance hot water storage tank. Using Hybrid Energy Recovery technology, it produces all the heat required to warm your living spaces, plus it *simultaneously* provides all the hot water needed for kitchen, showers, baths and laundry. That's efficiency!

ELECTRIC HOT WATER IS *EXTREMELY* EXPENSIVE TO PRODUCE IN YOUR HOME

WITH CONVENTIONAL GAS AND OIL SYSTEMS, we can compare hot water efficiencies. But estimating the efficiency of *electric* hot water is more complicated. That's true because ***electricity itself is drastically more expensive than gas or oil.*** For example, a typical electric water heater can legally display a yellow energy guide sticker that states its efficiency rating is 93%*!* On the surface, this sounds impressive. However, that rating means only that ***once electricity is connected to the heater, 93% of it is converted to heat.*** What you are ***not told*** is this staggering fact: ***Electricity itself is 3 to 5 times more expensive than either oil or gas. That means electric hot water usually costs 3 to 5 times more than System 2000 hot water!***

Electric water heaters like this are ***extremely inefficient*** and ***very expensive*** to operate.

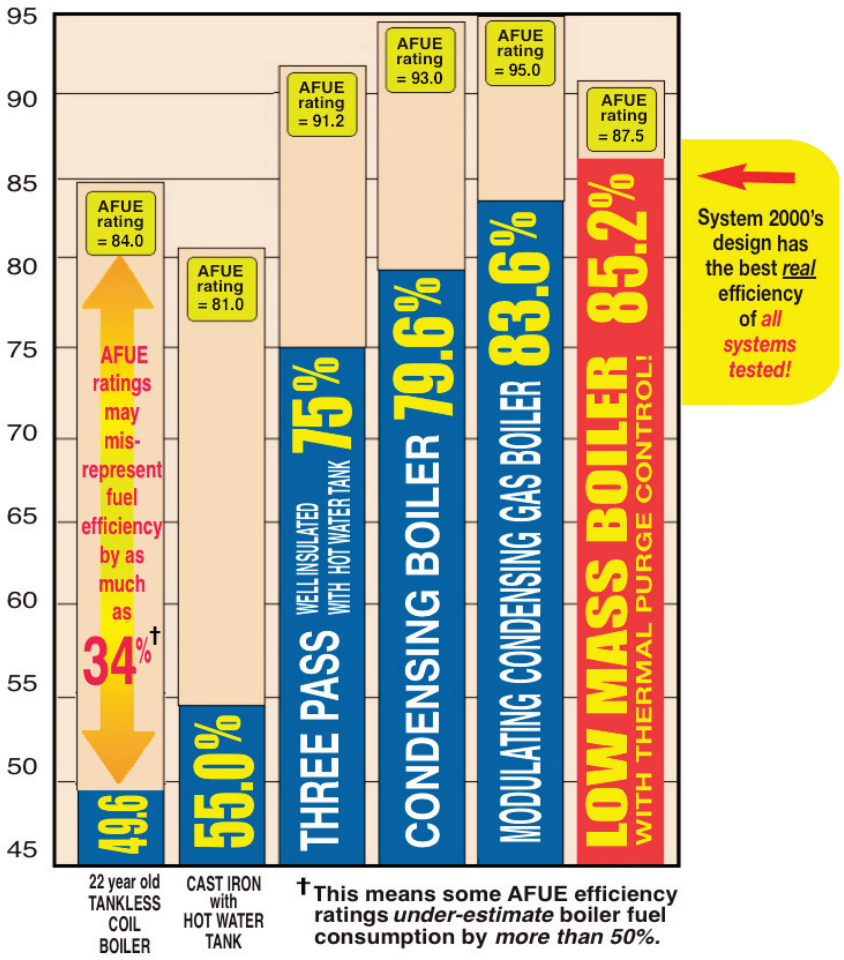
The average cost of residential electricity in New England was 31.08 cents/kW/hr in April 2023.[2]

That's like paying $12.36 per gallon of oil*!*

[2] Source: U.S. Energy Information Administration, (April 2023).(Oil energy content 138,700 BTU/gal and electricity 3412 BTU/kWh.)

A U.S. Department of Energy Brookhaven National Lab study concluded: AFUE is not accurate for boilers that make hot water.[3]

Compare these REAL efficiencies (yellow numbers) versus official government ratings (yellow boxes).



[3] Data and conclusions are drawn from the report "Performance of Integrated Hydronic Heating Systems (2007), Energy Resources Division, Department of Energy Sciences and Techology, Brookhaven National Laboratory, contract No. DE-ACO2-98CH10886 with the United States Department of Energy by Dr. T. Butcher; and "Chimney Related Energy Losses in Residential Oil-Fired Heating Systems" (1990). There is no federally prescribed testing and rating standard for combined appliances (i.e. appliances that make both heat and hot water); *AFUE is a heating-season only testing and rating method and does not represent the performance of combined appliances like System 2000.*

Below are the severe energy losses AFUE *doesn't* measure:

These losses may account for 15 – 20% of your fuel bill! The detailed chart on page 3 shows the inefficiency this process causes. The logical conclusion: Don't choose a heat and hot water system based on its AFUE rating. Instead, ask about a boiler's REAL EFFICIENCY as suggested by the yellow numbers on the chart shown on page 3.

Overview:

AFUE doesn't measure ***in any way*** how efficiently your boiler makes hot water for bath, showers, laundry and faucets, which typically equals 20-30% of your heating costs! [1]

Adding up all these common energy losses (listed at right), plus demands of making hot water, reveals the ***real*** efficiency rating of typical boilers.

These actual unbiased ratings are shown on the yellow numbers found on the chart shown on page 3.

Jacket loss

On inefficient boilers, poor insulation, usually only 3/4" of fiberglass (and that's only on the boiler jacket) allows heat to escape *constantly*. This loses a great amount of heat to your garage or basement. AFUE doesn't measure it. System 2000 has 2" to 4" of insulation all around, and is raised 18" off the cold floor. Other boilers heat up the boiler room and often have doors that radiate wasted heat that you can actually feel from several feet away! That's heat you are paying for!

EK1 and EK2 Frontier

Idle loss

Conventional boilers are hot at the end of a heat call, and some even continue to run day and night to keep hot water available, *even when no one is using hot water.* This is "idle loss," a terrible waste of energy. On a typical hi-mass boiler, idle losses are the inevitable result of the need to heat the equivalent of over 1000 pounds of iron, *every time the system turns on.* AFUE doesn't measure this terrible waste of energy.

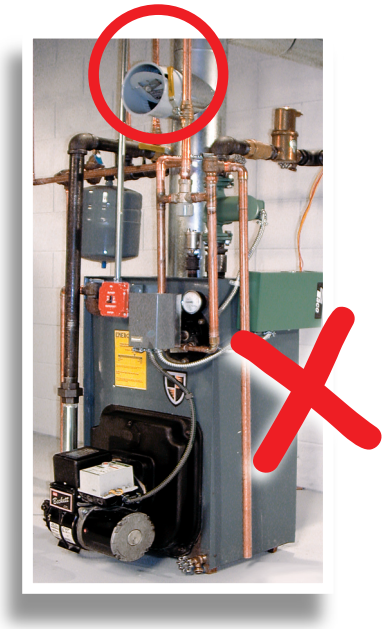
System 2000 had the lowest idle loss of **all** systems tested in the important, *independent* Brookhaven National Labs study. *Plus,* the System 2000 spiral boiler holds only 2.5 gallons of water and heats up 6 times faster than the competition. Combined with our high performance hot water system, System 2000's Hybrid Energy Recovery captures heat that other boilers simply waste, and virtually eliminates idle loss while meeting all your heat and hot water needs.

This page is important. It explains why you cannot rely on official government AFUE ratings to evaluate the efficiency of a boiler.†

About "demand fired" or *cold start* boilers

Boilers with heavily insulated tanks may store plenty of hot water, *but... they also waste energy*. Here's why: a large amount of energy is required to heat up 6-10 gallons of standby hot water, *plus* the *huge* amount of cast iron found in conventional boilers. Once hot water needs are met, the boiler shuts off ***and all this heat is WASTED.***

†"There are no federally prescribed testing and rating standards for combined appliances" (i.e.,appliances that make both heat and hot water). From: *U.S. Government AFUE, ANSI/ASHRAE 124-1991.*



Draft regulators, draft hoods and room air loss
Above: As seen on this typical tankless coil boiler, old-fashioned draft regulators and draft hoods lose a *tremendous* amount of energy, but:

Yellow AFUE labels *don't measure that loss.*

System 2000 *does not use a draft regulator.* Instead it draws outside air for combustion.

Draft regulators draw warm air out of your home in order to control chimney draft for the boiler, *but AFUE ratings don't measure this loss.*

System 2000 fuel savings repay your investment, . . . then provide extra money you'll have in your pocket year after year, . . . after year.

Savings with low mass/thermal purge System 2000 are much greater than with comparably rated heat and hot water systems. The top performing design features incorporated in System 2000, Accel CS,™ and Resolute™ heat and hot water boilers had the highest annual efficiency in the study – even better than the 95.0 AFUE boiler tested.

Comparing the 84.0 AFUE tankless coil boiler in the chart found on page 3, Energy Kinetics boilers with top performing design characteristics like System 2000 will cut fuel bills by over 42%...although there is only a 4% difference in heat only AFUE ratings. This means the tankless coil boiler will burn 72% more energy than System 2000.

EK1 and EK2 Stackable

Depending on your area of the country, System 2000 may be more costly to install than a conventional boiler or heater. But the fuel savings you can enjoy with System 2000 can often repay your investment over several years. After that, those annual savings are a cash bonus you'll earn year after year for many years to come!

At the same time, you'll enjoy System 2000 comfort and convenience, and, in addition, state of the art features that are far superior to other home heating systems and equipment.

SYSTEM 2000®
ENERGY KINETICS' COMBINED HEAT AND HOT WATER

Display Manager

- Automatic operation - ***there's no need to set or adjust complicated programs***
- Comes standard on every System 2000 - not an option like on typical boilers
- Better efficiency and performance than other "temperature reset" systems
- Monitors and controls System 2000 for peak heat and hot water efficiency
- Matches energy usage to the ***exact requirements of your home***
- State of the art digital intelligence allows priority for hot water
- Hybrid Energy Recovery makes sure ***no heat is left wasted in the boiler*** and saves fuel dollars. This cycle, combined with the low mass spiral boiler design, means idle losses are *virtually eliminated*.
- Hot water plus 4 zones are standard (15-zone option available)
- Plain text on the display makes it ***easy for the technician to service***

High Performance Domestic Hot Water System

- Heavily insulated storage tank for a ready supply of hot water
- Advanced technology stainless steel heat exchanger captures full boiler output for domestic hot water - and is ***recognized worldwide for the most effective and efficient heat transfer.***
- Integrated design works seamlessly with the Display Manager to provide energy recovery and the maximum efficiency
- Unique stratified storage for greatly improved water quality
- High output circulation system ***provides 228 gallons per hour****
- Optional high flow tanks for unique water requirements

Hard water? Our unique SEALIX® coated plate heat exchanger ***is shielded from mineral build up and corrosion!***

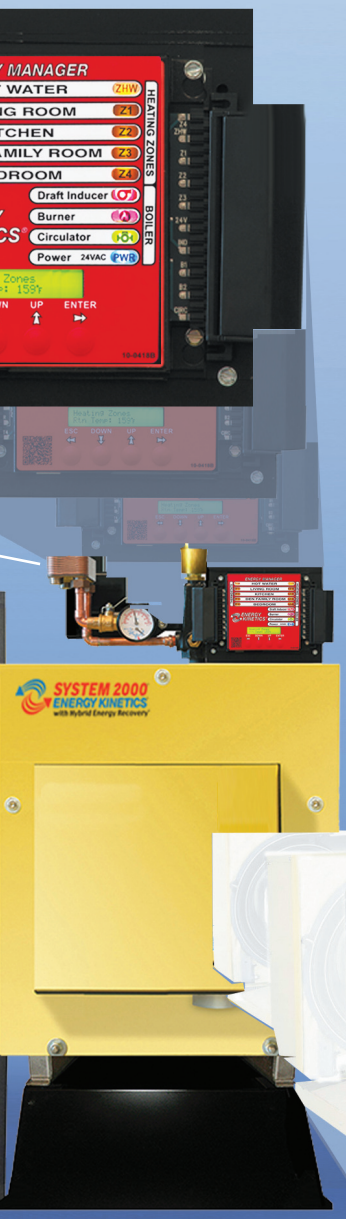
ENERGY STAR PARTNER

The system shown here has our optional low-rise base and silent burner cover.

The science behind quiet efficiency!

Three reasons System 2000's design is ranked #1 by Brookhaven National Laboratory in a study under contract with the U.S. Department of Energy.[1]

With Hybrid Energy Recovery, System 2000 produces your home's heat PLUS nearly endless hot water! And it runs so efficiently and quietly!



Unique, Durable Spiral Boiler Design

- 10 feet of energy absorbing flue passages along with our optimized low mass design. Contains only 2.5 gallons of water. That's 1/3 the mass of typical systems, ***for the best performance***
- No pins or baffles to foul up and reduce efficiency. PLUS our specially formulated steel boiler is a gasketless one-piece construction designed to last ***the life of your home***
- 20 to 50 times the insulation used on conventional boilers
- Special silent burner enclosure makes System 2000 ***more quiet than a microwave oven*** and is recognized as the *quietest oilheat system*; also available in ultra quiet gas heat
- Outside combustion air connection that won't take heated air from your home and ***virtually eliminates drafts***
- Durable combustion chamber provides near perfect combustion

3

[1] Data and conclusions drawn from the report *"Performance of Integrated Hydronic Heating Systems."* Paper and presentation by Brookhaven National Laboratory, Upton, NY, under contract No. DE-ACO2-98CH10886 with the United States Department of Energy by Dr. T. Butcher. Available on request.

* Domestic hot water rating based on EK-1 first hour draw with 70°F rise and 40 gallon storage tank. Our EK-2 model provides up to 350 gallons per hour.

With EK *Hybrid heat energy wasted in*

Lights indicate hot water production.

HERE'S WHAT HAPPENS WHEN YOU NEED HOT WATER:

As hot water is used, the tank thermostat signals the Display Manager and the Display Manager turns on the burner.

Within 90 seconds the domestic circulator is passing water from the storage tank through the stainless steel heat exchanger. This charges the top of the tank with hot water. Combined with the boiler, it provides 228 gallons of hot water per hour.

When the tank is reheated the tank thermostat signals the display manager which turns off the burner.

The Display Manager directs the domestic circulator to continue sending cooler water at the bottom of the tank through the heat exchanger. This unique process recovers the heat left in the boiler.

This heat is then stored back in the hot water tank, adding to your existing hot water supply. As a result, it's longer before the tank calls on the boiler for additional hot water - and that conserves your fuel dollars.

The result: no heat is left wasted in the boiler.

Energy Recovery,® is never left the boiler.

Lights indicate home heat production.

(System shown with optional silent burner cover and high rise base.)

HERE'S WHAT HAPPENS WHEN YOU NEED HEAT:

The Display Manager senses your thermostat(s) requirements, and turns on the burner.

Within 90 seconds the boiler sends heat through each zone valve, into your home.

When your thermostat is satisfied, the Display Manager turns off the burner.

The Display Manager then starts the unique Hybrid Energy Recovery which pumps any heat that is remaining in the boiler back into your home. This transfer takes about 20 minutes and guarantees that it will be longer before your thermostat needs to call for more heat.

When the Display Manager senses another call, the sequence begins again.

The result: no heat is left wasted in the boiler.

ENERGY STAR PARTNER

Maximize heat transfer during *every* hot water cycle, with our unique plate heat exchanger!

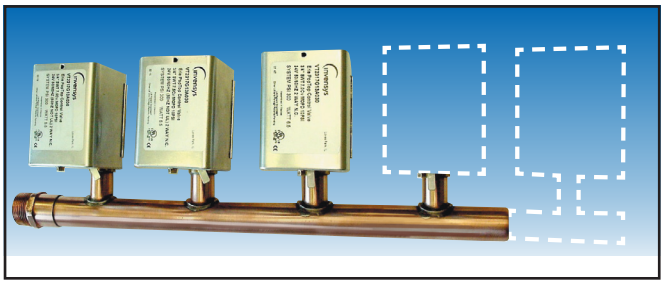
It's an innovation that vastly outperforms old fashioned tank with coil systems.

Above: Old fashioned tank with coil design
This design is inefficient because the tank heats slowly *all over,* even if you need only a small amount of heat or hot water. In addition, when the tank is finally hot, the boiler is left *even hotter*. So there is an automatic loss of heat energy every time the boiler heat has nowhere to go, *and that wastes tons of energy.*

Above: Energy Kinetics' Plate Heat Exchanger
By comparison, our plate heat exchanger draws cold water from the *bottom* of the tank and feeds hot water from the *top down*. This makes hot water faster and delivers the highest efficiency through the entire hot water cycle.This energy recovery means *no heat is left wasted in the boiler.*

SEALIX® plate heat exchangers

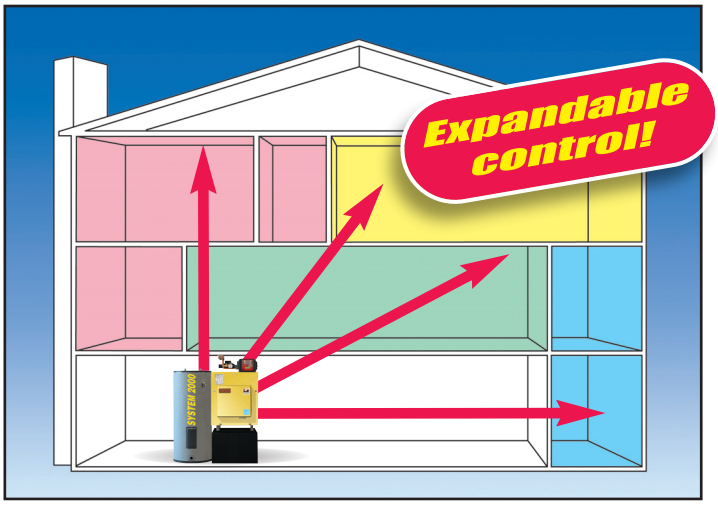
Hard water? *No problem!* Our unique ***SEALIX***®coated plate heat exchangers shield passageways from mineral build up and corrosion! Now standard on all Energy Kinetics boilers!



Expandable up to 15 zones!

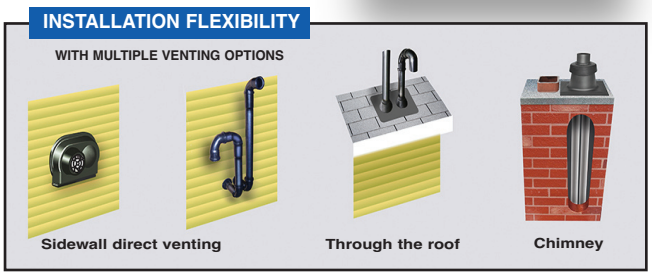
Energy Kinetics' systems offer sophisticated *zoned* comfort for *year-round enjoyment of every room in your home.*

Our Display Manager controls multiple zones and provides nearly endless hot water. This flexibility means you can control the energy used to heat unoccupied rooms while living areas stay cozy and comfortable. Zones also can be expanded in the future to accommodate changing life styles or home renovations.



Precise, expandable control maintains comfort levels in all areas of your home.

Vent through side walls or through an existing chimney! Side wall vents remain cool to the touch!



ANOTHER BONUS MONEY SAVER!

Energy Kinetics systems can be installed *with or without* a chimney.

Many homeowners, planning to save money by upgrading or converting to another fuel, sometimes find themselves up against a brick wall: it's the high cost of relining or repairing an existing aging chimney!

But Energy Kinetics' revolutionary designs run clean and relatively cool. This allows for safe venting directly through the wall, much like your clothes dryer venting system. This can save thousands of dollars on costly chimney upgrades.

NOW! You can also vent many of our boilers up an existing chimney using our low-cost polypropylene chimney lining system. There's no need to install a much more expensive stainless steel chimney liner! (See details on page 11).

Energy Kinetics' Family of Efficient Products

There's a versatile Energy Kinetics configuration that's *just right for you.*

Energy Kinetics manufactures systems that are perfect for homes fueled by oil, natural gas, or propane. There are models specifically designed for the smallest condominium to the largest estate.

In addition, ask your heating representative for details about stackable configurations for closets and tight spaces, plus swimming pool and spa heaters.

Ask about:

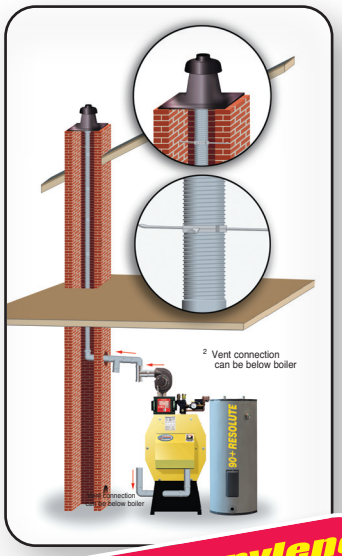
Resolute™ RT
HIGH EFFICIENCY BOILER by ENERGY KINETICS

INSTALLS EASILY with POLYPROPYLENE VENTING!

NO HIGH PRICE STAINLESS STEEL CHIMNEY LINER NEEDED!

Multi-Fuel

Multi Fuel non-condensing Oilheat or Gas with Hybrid Energy Recovery



Accel CS ™
Modulating condensing gas
Condensing Gas
INSTALLS EASILY with POLYPROPYLENE VENTING!

Resolute™ RT
High efficiency oil or gas
Multi-Fuel
INSTALLS EASILY with POLYPROPYLENE VENTING!

System 2000®
High efficiency oil or gas*
Multi-Fuel
INSTALLS with CONVENTIONAL CHIMNEY VENTING

Ascent™ Plus Combi
Combi boiler oil or gas
Multi-Fuel
INSTALLS EASILY with POLYPROPYLENE VENTING!

Ascent™ Combi
Combi boiler oil or gas**
Multi-Fuel
INSTALLS with CONVENTIONAL CHIMNEY VENTING

EK3
High efficiency oil or gas*
Multi-Fuel
INSTALLS with CONVENTIONAL CHIMNEY VENTING

See product specifications for all ratings and firing data.

SYSTEM 2000 EK1 and EK2 STACKABLES*

TANKS
High-efficiency thermos-like hot water storage tanks

Rest assured! You'll enjoy service by only America's top leading heating professionals!

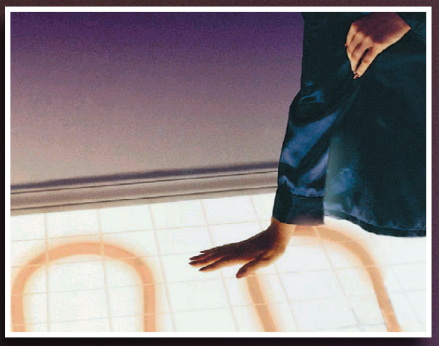
Energy Kinetics is represented by the best heating professionals in your area. Our factory-direct Pro-Train™ programs for installers and technicians mean you'll benefit from the industry's leading technology. Tech support includes both telephone service and website assistance and backup at: ***Energy Kinetics.com.***

® The color yellow for heating boilers is a registered trademark of Energy Kinetics. * Shown with optional silent burner cover and base. ** Shown with optional silent burner cover.

Energy Kinetics delivers the heat!

Our systems run on oilheat, natural gas and propane, and are compatible with all heating applications, including:

HAND CRAFTED BY AMERICANS FOR AMERICAN HOMES
ENERGY KINETICS



Radiant

Radiator

Pools and spas

Baseboard

Toe kick

Hydro-air and heat pump backup

Unit heater

Forced air

(See warranties for specific details.)

Authorized Energy Kinetics Dealer:

Energy Kinetics is committed to quality with *the finest warranty in the industry*:

- Residential lifetime limited warranty on pressure vessels
- Residential lifetime limited warranty on Display Managers
- 10-Year warranty on standard tanks
- Built with industry standard and factory direct parts

ENERGY STAR PARTNER

Energy Kinetics is an ENERGY STAR® Partner and a leading manufacturer of ENERGY STAR heating equipment.

ENERGY KINETICS®

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