

System 2000 delivers the heat!



Radiant



Toe kick



Hydro-air and heat pump backup



Baseboard



Forced air



Unit heater

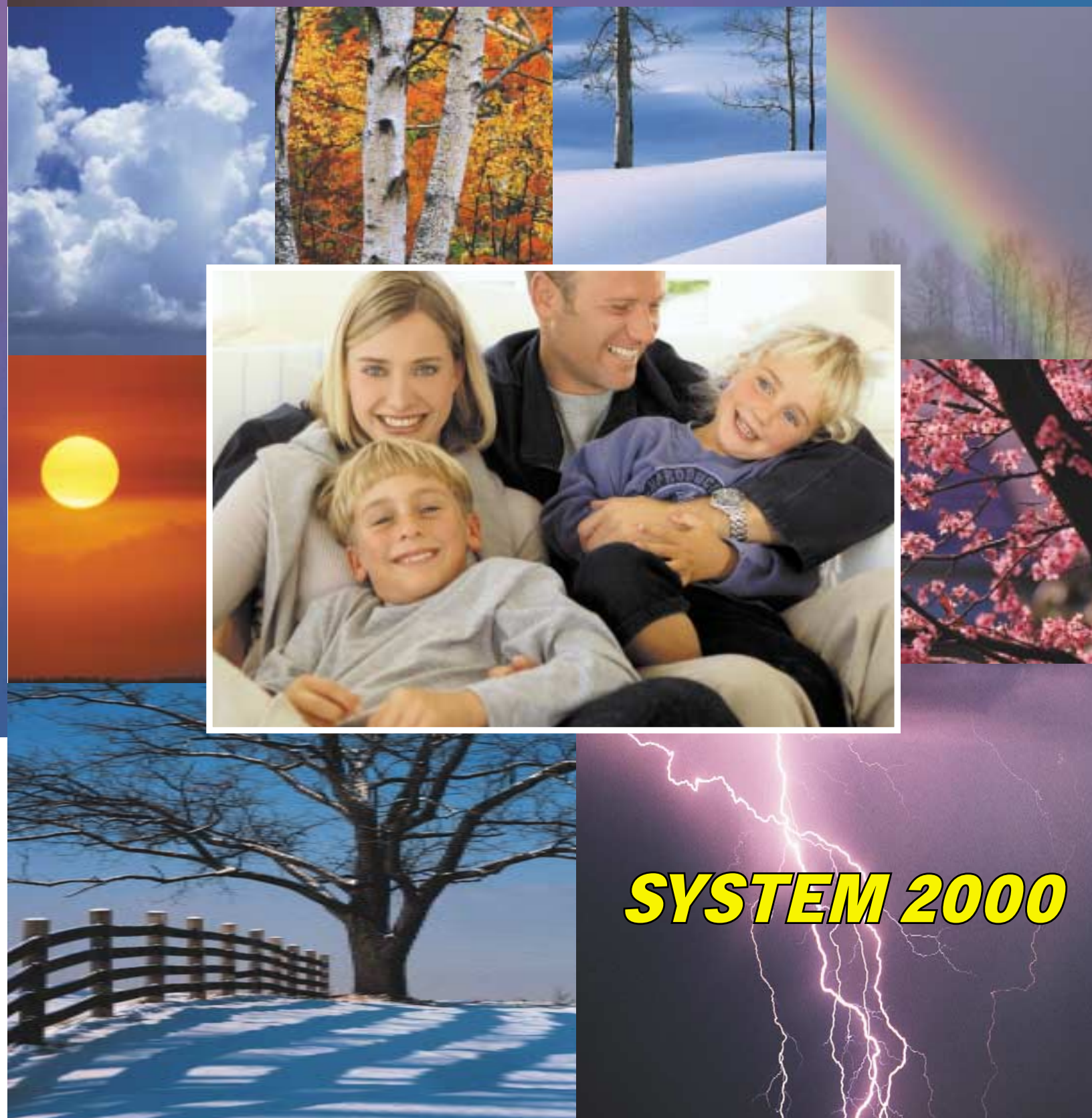


Pools and spas



Radiator

Season after season,
whatever the weather.



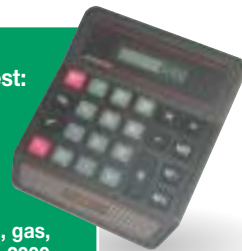
SYSTEM 2000

Authorized System 2000 Dealer:



System 2000 Energy Kinetics, 51 Molasses Hill Road, Lebanon, NJ 08833
(800)323-2066 Fax (800)735-2068 system2000.com

To get the most from this information, may we suggest: Before you continue to read, locate your heating bills from the last two years. Keep a small calculator handy to add up the bills. Determine if your home is currently heated by oil, gas, propane or electricity. (System 2000 will save you money no matter what fuel you currently use.)




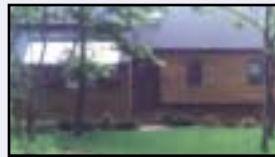




Your heating/hot water system is a lifetime investment, but it takes only a few minutes to learn which one is right for you! System 2000!

TWO WAYS THAT HOMEOWNERS SAVED MONEY WITH SYSTEM 2000:

1. NEW CONSTRUCTION: HEAD TO HEAD COMPARISONS SHOW HOW HOMEOWNERS SAVED ON ENERGY


System 2000 was tested against modern, conventional boilers in 3 sets of brand new, identical homes. The homes were all built by the same contractor, in similar geography, and are identical in every important specification: same size, same materials, same insulation. Only the heating systems were different. And, of course, the fuel consumption.

Your home is no doubt your number one investment. Installing or replacing its heating system is an opportunity to improve your investment. System 2000 will save you money. Take a few minutes here to learn why System 2000 is the right choice no matter what style of home you own.

HOME WITH CONVENTIONAL HEATING	SYSTEM 2000 HOME	ANNUAL SAVINGS
 2,560 sq. ft.	 2,560 sq. ft.	42%
 2,560 sq. ft.	 2,560 sq. ft.	47%
 3,700 sq. ft.	 3,700 sq. ft.	31%

AVERAGE ANNUAL SAVINGS WITH SYSTEM 2000: 40%

2. FOUR EXAMPLES OF UPGRADES TO SYSTEM 2000 THAT SAVED HOMEOWNERS MONEY

	50% SAVINGS EQUALED \$500	51% SAVINGS EQUALED \$510	53% SAVINGS EQUALED \$530	46% SAVINGS EQUALED \$460
				

COMPARISONS BASED ON AN ORIGINAL ENERGY BILL OF \$1000 ANNUALLY:

R.W., Bernardville, New Jersey Replaced a boiler that had a 79% efficiency. Converted to 2 zones. **Saved 50%**

E.W., Middletown, CT. Replaced a boiler and oil fired water heater, converted to 2 zones. **Saved 51%**

W.Y., Cromwell, CT Replaced a boiler and water storage tank, converted to 2 zones. **Saved 53%**

M.L., Bennington, VT. Converted from a boiler with a modern burner. **Saved 46%**



System 2000 provides abundant hot water at significant savings.

Because System 2000 is an integrated system, it can produce tremendous amounts of hot water for far less than conventional boilers. In fact, System 2000 produces enough hot water to run the dishwasher, the washing machine and several showers all at the same time (virtually impossible with conventional boilers). And since hot water is expensive, typically accounting for 1/3 of your total heating costs, producing it economically is important. System 2000 does it by combining 3 high performance components:

- a high capacity hot water tank
- stainless steel hot water heat exchanger
- low mass high efficiency boiler that produces more hot water per hour

How much hot water does your family use every day?

You may be surprised to learn that a typical family uses 64 gallons every day! In fact hot water = 1/3 of a typical home's heating cost!

System 2000 actually produces many times over the amount of hot water that is normally available from traditional hot water systems. The differences are amazing. On average, System 2000 makes as much as *8 times more hot water than an electric hot water heater* and 3 to 4 times more than a typical gas hot water heater.



Dirty Laundry: 18 gallons per load



The Dishes: 16 gallons per load

The Shower: 12 gallons per shower

TYPICAL ANNUAL COST FOR HEATING HOT WATER BASED ON HOMES IN NORTH EASTERN U.S., 2001 - 2002

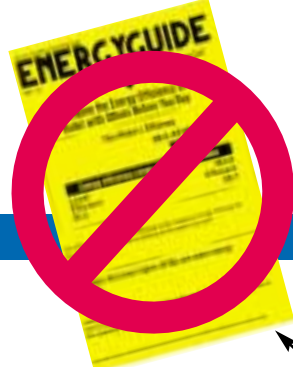
System 2000	\$144 - 170
Gas water heater	\$264 - 360
Conventional boiler	\$288 - 390
Electric	\$461 - 684

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

Depending on your area of the country, System 2000 may be slightly more costly to install than a conventional boiler or heater. But the chart at left shows how the savings you enjoy with System 2000 can *easily* pay for this increase in as little as four 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 that is far superior to other home heating equipment.

Unscrambling the AFUE mess – The secret to saving *big* energy dollars.



Don't be misled by these AFUE government "efficiency" stickers.

AFUE ratings lead to inaccurate claims

Most conventional boilers claim to be "high efficiency" because their AFUE (government) efficiency ratings are based only on limited testing. AFUE measures *only energy wasted from boiler heat that's lost up the chimney*. With their short heat transfer passages – some only 16" or less – conventional boilers simply can't absorb much of the heat they create before it literally goes up the chimney. AFUE accurately records this loss. However there are other *more costly* inefficiencies that AFUE ignores completely. For example:

HOW CONVENTIONAL BOILERS WASTE ENERGY:

AFUE does NOT measure:

Jacket loss
Poor insulation on the boiler (usually only 3/4" of fiberglass - and that's only on the boiler jacket!) allows heat to escape constantly. This means you're losing heat to garage or basement – not heating your home. AFUE doesn't measure it.

Standby loss
Conventional boilers run day and night to keep hot water available, *even when no one is using hot water*. This is "standby loss," and it's a terrible waste of energy. On a typical hi-mass boiler, standby 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 it.

Or:
Draft regulator and room air loss
Sucks warm air out of your home to control chimney draft for the boiler. AFUE doesn't measure it. Note: System 2000 uses outside air for combustion and does not have a draft regulator.

ABOUT DEMAND FIRED OR SO-CALLED COLD START BOILERS
While boilers with heavily insulated tanks may store plenty of hot water, they also waste significant energy. Here's why: A tremendous amount of energy is still needed to heat up the 6-10 gallons of water and massive amounts of cast iron in conventional boilers. Then, once your hot water needs are met and the boiler shuts off, this heat is wasted. Typically, this will account for about 15-20% of your annual fuel bill.

In addition:
AFUE doesn't measure how efficiently your boiler makes hot water for bath, laundry and faucets, typically 25-35% of your heating costs!
AFUE ratings evaluate *only* energy wasted from boiler heat that's lost up the chimney. Adding up all the common energy losses listed at left, plus the demands of hot water making, reveals the *real efficiency ratings* of boilers, which are shown in the blue boxes on these pages.

There are no federally prescribed testing and rating standards for combined appliances. * (Heat and hot water).

So the logical conclusion is: Don't choose a home heating system based on its AFUE rating. Instead, inquire about the system's real efficiency rating.



* U.S. Government AFUE, ANSI/ASHRAE 124-1991



For the most energy cost savings, choose System 2000!

AFUE rating =87%	Real rating =83%
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Compare to all the other *real* ratings shown at below left!

Low chimney loss

System 2000 minimizes chimney loss with a unique counterflow design and over 10 feet of heat transfer passage.

Almost no jacket loss

System 2000 has 2-4" of insulation all around, and is raised 18" off the cold floor.

Near zero standby loss

The System 2000 patented spiral boiler holds only 2.5 gallons of water and heats up six times faster than the competition. Combined with the high performance hot water system, Energy Recovery™ captures heat that other boilers waste, and virtually eliminates standby loss while meeting all your heat and hot water needs.

No draft regulator loss

System 2000's advanced design does not require draft regulation and uses outside air for combustion.

No heat is left wasted in the boiler.

THREE TYPICAL INEFFICIENT BOILERS:

Conventional gas boiler and water heater.

AFUE rating =80%	Real rating =63%
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Cast iron tankless coil boiler.

AFUE rating =86%	Real rating =56%
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Typical high-mass boiler with indirect water heater.

AFUE rating =86%	Real rating =62%
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THE ELECTRIC HOT WATER ENERGY PIT:

With conventional gas and oil systems, it's possible to make general comparisons on efficiency. However, estimating the efficiency of electric hot water is more complicated because electric power is drastically more expensive than either gas or oil. For example, a typical electric hot water heater can legally display an AFUE 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 the electricity is converted to heat. What is not represented in this AFUE rating is this staggering fact: *electricity itself is 4 to 6 times more expensive than either oil or gas*.

That means that electric hot water usually costs 4 to 6 times more than SYSTEM 2000 hot water! The *real* efficiency of making hot water with electricity is an embarrassing 28%.

AFUE rating =93%	Real rating =28%
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Three reasons System 2000 saves energy and runs soooooo quiet!

High Performance Domestic Hot Water System

- Heavily insulated storage tank provides a ready supply of hot water
- Advanced technology stainless steel heat exchanger captures full boiler output for domestic hot water - recognized worldwide for most effective and efficient heat transfer.
- Integrated design works seamlessly with the Digital Energy Manager to provide energy recovery and maximum efficiency
- Unique stratified storage for improved water quality
- High output provides 210 gallons per hour*
- Optional tanks for unique water requirements

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



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Digital Energy Manager

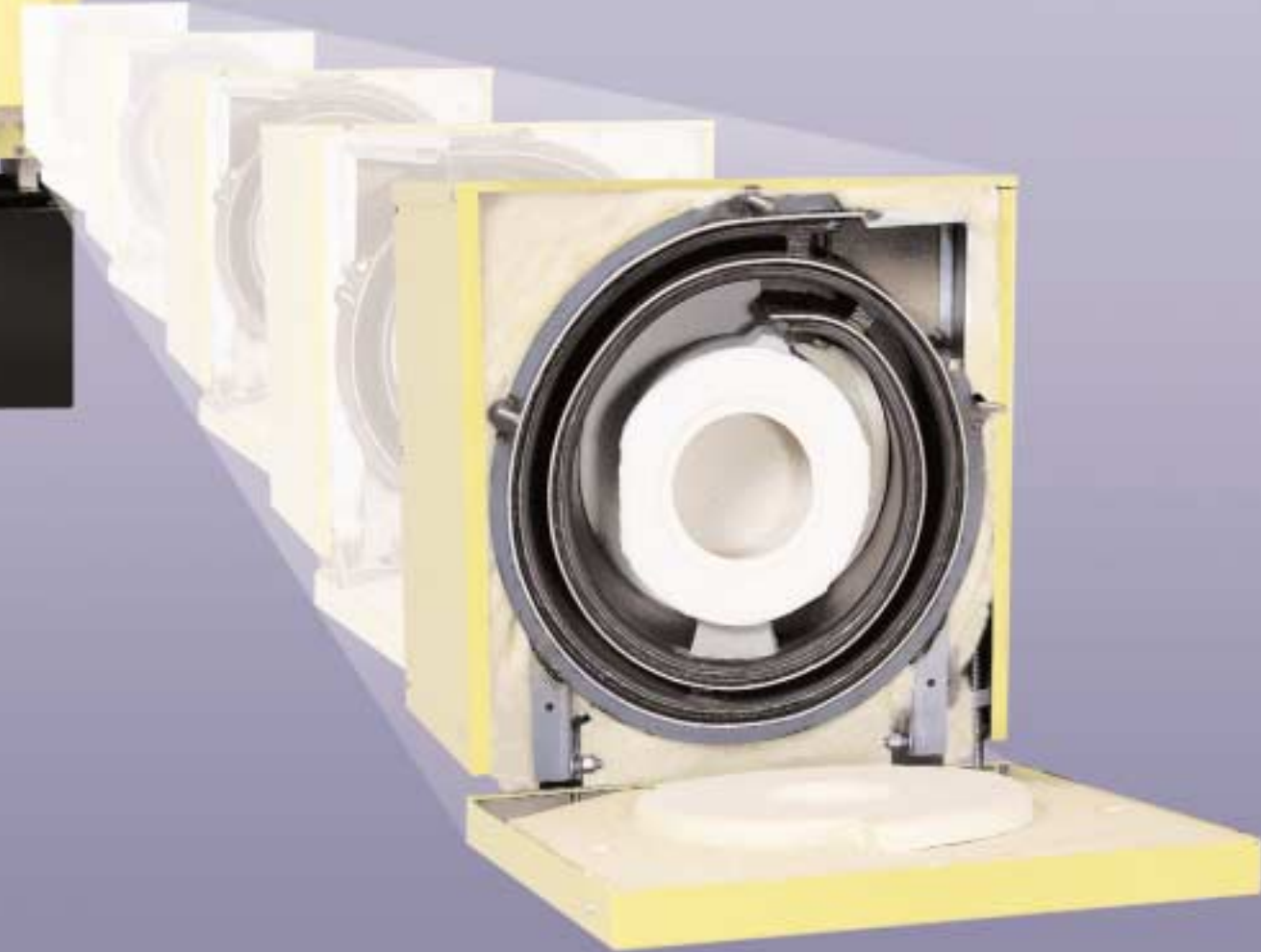
- Automatic operation – no need to set or adjust complicated programs
- Comes standard on every System 2000 – not an option like on typical boilers
- Monitors and controls System 2000 for peak heat and hot water efficiency
- Matches energy usage to the exact requirements of your home
- Allows priority for hot water
- Energy Recovery Cycle™ makes sure no heat is left wasted in the boiler and saves fuel dollars
- Hot water plus 4 zones standard (10 and 15 zone options available)

1.

Unique, Patented Spiral Boiler Design

- 10 feet of energy absorbing flue passages
- Ultra low mass design contains only 2.5 gallons of water
- 1/3 the mass of typical systems for highest efficiency
- 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 - recognized as the quietest oilheat system; also available in ultra quiet gas heat
- Outside combustion air connection - doesn't steal heated air from your home and eliminates drafts
- Durable combustion chamber provides near perfect combustion

3.



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With System 2000's unique Energy Recovery Cycle,TM no heat energy is left wasted in the boiler.



HERE'S WHAT HAPPENS WHEN YOU NEED HOT WATER:

As hot water is used, the tank thermostat signals the Digital Manager and the Digital 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 can provide 210 gallons of hot water every hour.

When the tank is re-heated, the thermostat signals the aquastat which turns off the burner.

The Digital 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.**



HERE'S WHAT HAPPENS WHEN YOU NEED HEAT:

The Digital 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.

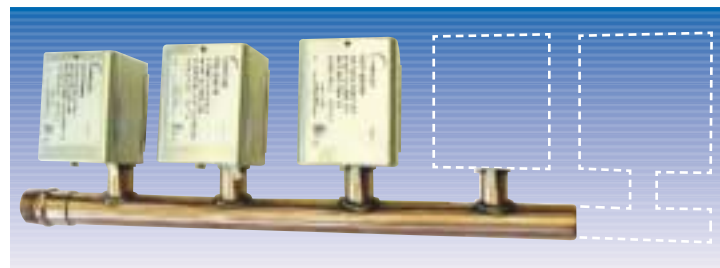
When your thermostat is satisfied, the Digital Manager turns off the burner.

The Digital Manager then starts the unique Energy Recovery CycleTM that 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 Digital Manager senses another call, the sequence begins again.

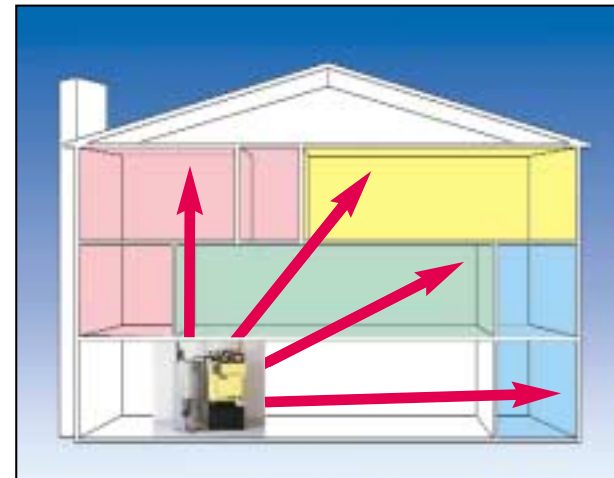
The result: **no heat is left wasted in the boiler.**

System 2000 provides sophisticated zoned comfort for year-round enjoyment of every room in your home.



System 2000 is expandable up to 15 zones

The System 2000 Digital Manager controls multiple zones and provides near 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.



System 2000 provides precise, expandable control to maintain comfort levels in all areas of your home.

Bonus money saver! Your System 2000 can be installed with or without a chimney.

Many homeowners who plan to save money by converting from expensive electric heat and heat pumps find themselves up against a brick wall: the high cost of chimney construction.

But System 2000's unique combustion chamber, combined with 10 feet of heat transfer passage, means that gases leave the system clean and relatively cool. This allows them to be safely vented directly through-the-wall, even at yard level. No need for costly chimney construction!

For chimney-less installations, System 2000's stainless steel vent works similar to your dryer vent and features a patented air-cooled surface - never hot to the touch.



Through-the-wall venting saves thousands of dollars on the cost of a new chimney, an excellent benefit for new home construction. This also means System 2000 is perfect for electric conversions.



System 2000 can also be easily vented through any existing chimney - perfect for replacing aging oil or gas heating systems.

There's a versatile System 2000 configuration that's right for you.



System 2000 is perfect for homes fueled by oil, natural gas or propane. There are models specifically designed for the smallest condominium to the largest estate.

Choose from heat and hot water, or heat-only models.

In addition, ask your heating representative for details about the System 2000 Stackable™ configurations for closets and tight spaces, the Freedom™ weather-tight outdoor model and swimming pool and spa heaters.



High-efficiency hot water storage tank sizes handle the largest hot water requirements. Durable glass-lined or stainless steel models provide high performance in all water conditions.



Your family's comfort is assured because System 2000's high quality and performance are designed to last the life of your home.

System 2000 means value for your home and peace of mind for your family.

Our commitment to quality includes:

The finest warranty in the industry:

- Lifetime limited warranty on System 2000 boilers
- Lifetime limited warranty on Digital Energy Managers
- Full 3-Year warranty on all standard components

In addition:

- Energy Kinetics System 2000 is represented by only the best heating professionals in your area.
- Our factory direct Pro-Training™ programs for installers and technicians mean you'll benefit from the industry's leading technology.

