

System 2000 is Whisper Quiet
and Installs Easily with
Chimney Venting!

100% Bioheat[®]
fuel ready!

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

SYSTEM 2000[®]

ENERGY KINETICS' COMBINED HEAT AND HOT WATER

* See footnote at the
bottom of page 2.

UP TO
88.6 AFUE



EK1 and EK2 Frontier

EK1 and EK2 Stackable

Approved for venting
below the breech!

Multi-Fuel

- Runs on oil, gas OR biofuel (with blends of up to **100% biodiesel!**)
- Combined heat and hot water in one boiler!

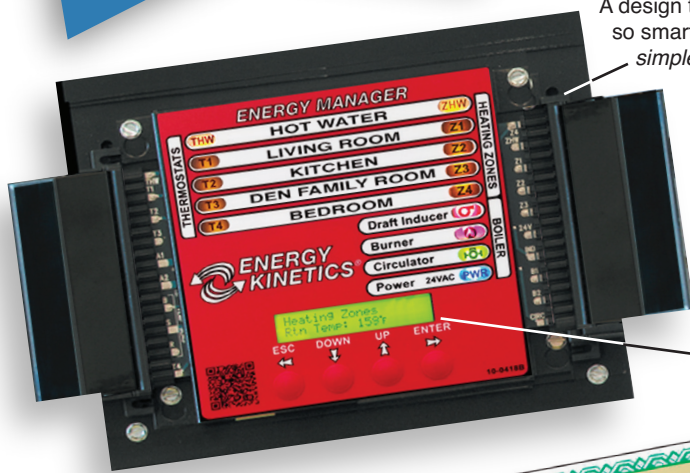
PLUS:

- Whisper quiet with silent burner cover – no need to turn up the TV!
- Replaces 2, 3 and 4 section oil boilers!
- Lifetime Limited Warranty[†]
- Proven 30 year boiler!

[†] See actual
warranty for details.

4 ways

System 2000 Frontier out



A design that's so smart it's simple!

1

The unique Brain, controlling the world's smartest boiler!

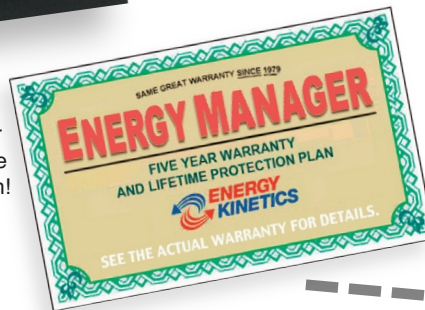
On board diagnostics and "play by play" information make understanding and servicing boiler operation easy for everyone.

Energy Kinetics' boiler technology outperforms and outlasts the competition. **It's the boiler with *The Brain, our Energy Manager.***

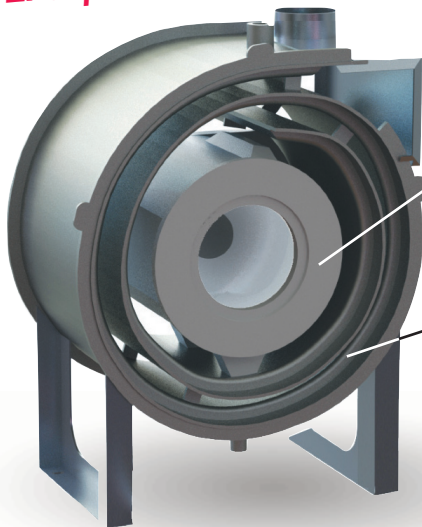
The Energy Manager's energy recovery maximizes home heating efficiency, cuts fuel bills and is perfectly integrated with our low mass boiler. It heats quickly, gets the job done, then searches for left over energy in the system and **sends the remaining heat into your home or hot water.**

3

The Brain/Energy Manager is covered by a five year warranty and lifetime protection plan!



The Patented System! Exceptional boilers by Design!



Our patented 10' spiral flue passage.

The heart of System 2000 is our proven 30-year low mass spiral steel energy converter that **no cast iron or combi boiler can match.**

Energy Kinetics' engineers deconstructed every component of all **cast iron boilers** and developed a proven 30 year spiral design for the highest efficiency. With dozens of improvements over traditional boilers, it is easy to see why it outlasts and outperforms the competition. *Here are some highlights:*

- Specially formulated steel with **no gaskets, sections or pins to foul, clean or leak.**
- High Performance ceramic chamber for near perfect combustion and **ultra clean operation.**
- Swing down door for easy access.
- **Over 90 pounds of exterior jacketing plus 2" of thick insulation for quiet, efficient operation.**
- **Built-in superior air elimination.**

What does Bioheat fuel mean to me?

Bioheat fuel, or biodiesel, is a renewable, biodegradable high grade fuel manufactured domestically from waste stream sources including vegetable oils, animal fats or used cooking oil. It's a clean, easy choice to reduce emissions *without sacrificing your comfort or fuel efficiency.* **System 2000 can use fuel oil blends up to 100% biodiesel (B100). THIS CAN CUT CARBON EMISSIONS UP TO**

85%

* Data and conclusions are drawn from the report "Performance of Integrated Hydronic Heating Systems" (2007), Energy Resources Division, Department of Energy Sciences and Technology, BNL, Under 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).

lasts and **outperforms** other boilers!

2

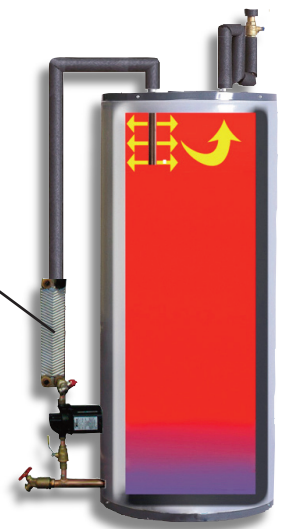
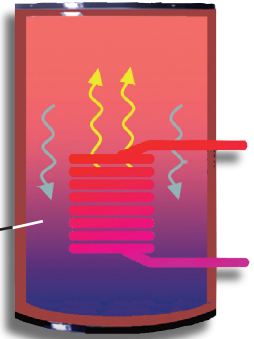
Advanced plate heat exchanger!

NEW! Our unique SEALIX® coated plate heat exchanger *vastly* outperforms old fashioned coil-in-tank systems. Plus it's shielded from mineral build up and corrosion!

Old fashioned tank with coil.

This design is inefficient because the tank heats slowly *all over*, even when you need only a small amount of heat or hot water. In addition, the temperature of the system's boiler is allowed to rise *above* the tank's temperature, meaning there is an automatic loss of heat energy every time the boiler heat has nowhere to go. That wastes tons of energy.

Our superior System 2000 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 delivers efficiency through the entire hot water cycle. ***Our tanks finish hot and fully charged while the boiler finishes cool. So no wasted heat!***



Our thermos-like tank!



UP TO **88.6** AFUE

Swing down door or easy servicing.

Silent burner cover for whisper quiet operation plus 2" of thick insulation for even more efficiency.

Built-in stand keeps System 2000 off the cold floor.

The Quiet Sound! System 2000 is virtually silent!

NOTE: A boiler that is just **one** decibel higher is **30 percent louder!**

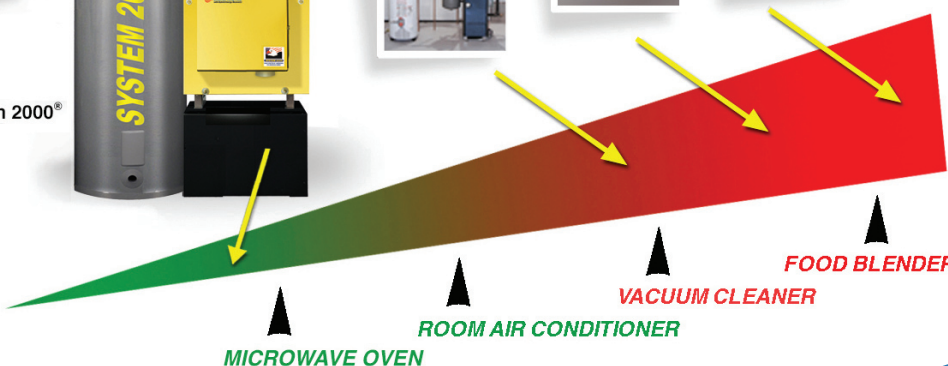
4

At 62 decibels, other boilers make it hard to hear a TV in the next room. **At just 47 decibels – the sound of a private conversation – System 2000 is virtually silent!** To understand how significant this decibel difference is, realize that a boiler that is just one decibel higher **is 30 percent louder!**

NOISE LEVELS OF OTHER BOILERS:



System 2000®



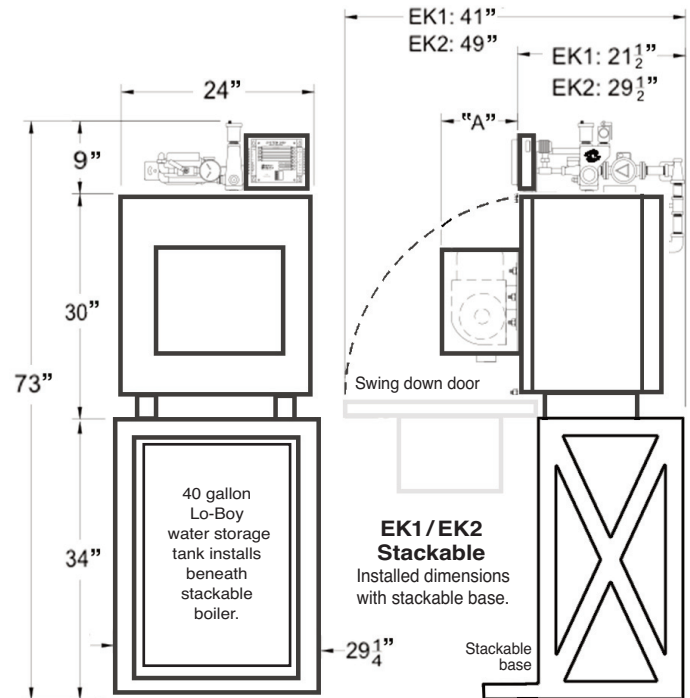
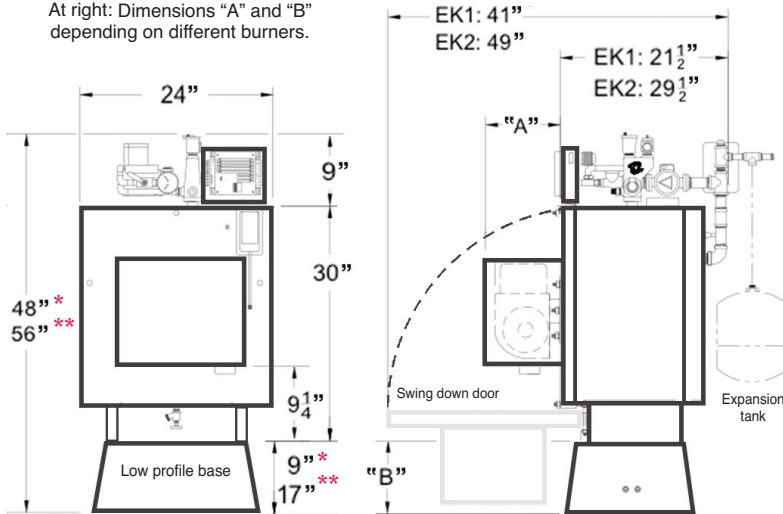
EK1 and EK2 System 2000 Frontier and Stackable Installation Dimensions

EK1/EK2 Frontier

Installed dimensions with a **low profile** boiler base ** or a **standard** boiler base. **
Shown without the required water storage tank.

At right: Dimensions "A" and "B" depending on different burners.

	Dim "A"	W/O box	With box	"B"
Beckett AFG	8"	9 1/2"	9"	9"
Carlin EZ-1	9"	9 1/2"	9"	9"
Riello 40F5	13"	N/A	15"	15"



Service clearances: 20" from front door face, 0" left side and right side. Clearance to combustibles: 4" from the rear cover; 16" above top cover; 4" from flue pipe.

Included (factory piped and assembled): Boiler base, blocked vent switch, dynamic air elimination manifold, ON/OFF switch, surge protection and junction box, 3/4" drain valve, plate heat exchanger on hot water models, circulator and door safety switch.

Draft regulator not required or recommended due to advanced combustion chamber. Energy Converter weight 350 lbs.

Scan the code at right to see the complete line of all Energy Kinetics boilers.

Or to visit our website at EnergyKinetics.com scan the code below.



Oilheat and Bioheat® fuel home heating system†

Model	Input Rating (GPH)	Heating Capacity (MBH)	AFUE	Domestic Hot Water *
EK1F-95	0.68	82	88.6	155
EK1F-105	0.74	89	88.2	175
EK1F	0.85	102	87.5	195
EK1F-140	1.00	118	86.6	205
EK2F-168	1.20	149	88.4	270
EK2F	1.40	170	87.6	300
EK2F-224	1.60	191	86.6	345
EK2F-245	1.75	207	85.9	375

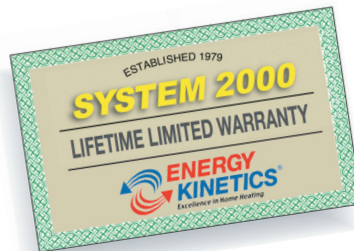
† UL listed for use with oilheat blends up to 100% biodiesel (ASTM D6751) with a B100 listed burner.

* Domestic hot water rating based on first hour draw with 67°F rise and a 3 gpm draw on a 40 gallon tank; first hour draws over 195 gallons are calculated based on continuous draw with 67°F rise at maximum flow rate.

Natural gas and propane home heating system

Model	Input Rating (MBH)	Heating Capacity (MBH)	AFUE	Domestic Hot Water *
EK1F-80	80	69	88.4	135
EK1F-100	100	86	87.4	175
EK1F	120	103	86.4	195
EK1F-150	150	128	85.0	205
EK2F-175	175	152	86.7	270
EK2F	200	171	86.0	300
EK2F-225	225	191	85.2	345
EK2F-250	250	210	84.4	375

Frontier	EK1F	EK2F
Weight	270 lbs	350 lbs
Water Content	2 1/2 gallons	4 gallons
Air Inlet Pipe	2"	3"
Boiler Flue Outlet	4"	6"
Minimum Flexible Chimney Liner	5" Dia.	6" Dia.
Hydronic Supply	1"	1 1/4"
Hydronic Return	1"	1 1/4"
Hydronic Circulator	Taco 007e	Taco 0010



Lifetime limited warranty on the Digital Energy Manager and on the residential ASME pressure vessels. See the actual warranty for details.



As an ENERGY STAR® Partner, Energy Kinetics has determined that model EK1F meets the ENERGY STAR guidelines for energy efficiency for oil heat input from 0.85GPH. ® The color yellow for heating boilers is a registered trademark of Energy Kinetics.



Energy Kinetics / System 2000®
51 Molasses Hill Road, Lebanon, NJ 08833

(908) 735-2066



Scan code to visit our website

EnergyKinetics.com