

The Department of Energy's new rule on water heaters

Effective April 16, 2015,

a new rule from the Department of Energy, part of the National Appliance and Energy Conservation Act (NAECA) mandates higher energy efficiency on almost all residential water heaters.

Some water heaters, like the Accelera® 300 heat pump water heater and Stiebel Eltron tankless water heaters, currently meet this rule. Many water heaters from other manufacturers do not.





Stiebel Eltron has had more than one way to comply since before the standards went into effect.



The Accelera® 300 heat pump water heater met the new standards before it was the new standards.

50 gallons of 140°

hot water can be

drawn before the

back-up element

is needed. Most

household draws

can be satisfied

through the heat

pump alone.

This is not a "hybrid." It's a heat pump water heater.

Decades of experience made it obvious to us that a heat pump water heater ought to make hot water with the heat pump, and not with a back-up element. This simple solution seems to have escaped others, yet made our heat pump water heater the largest seller in Europe for over 30 years.

> Engineered to be the best

 30+ years manufacturing heat pump technology.

Standard HVAC fittings

> Easy and simple design

> Low maintenance

Homeowner and installer friendly

 No gimmicky options that don't increase functional output

 Manufactured with only the best components because better components = better product

 Direct-ship from factory to job site available (fees apply)





Accelera® 300

Capacity	Energy	Typical	First	Sound	Rated	Rated	Electrical
	Star	COP	Hour	Pressure	Power	Power	Requirement
	Energy	Range	Rating	Level	Draw for	Draw for	
	Factor				Heat Pump	Element	
80 gal	2.73	3-6	78.6	55.2 dB(a)	500 W	1700 W	240/208 V
(300 l)			gal	@ 3.3 ft			15 A breaker

Every Stiebel Eltron tankless electric water heater has always met the new standards, and has an Energy Factor between .98 and 1.0

Why tankless from Stiebel Eltron?

- Engineered in Germany and proudly made in Germany and the U.S.A.
- Advanced Flow Control™ on Plus models auto adjusts water flow to maintain set temperature if demand temporarily exceeds capacity. Stiebel Eltron is the only manufacturer of tankless electric water heaters with this feature.

STIEBEL ELTRON

Specially designed back-

up element is placed to

is available during high

demand periods but that

the element is needed

20 sq. foot condenser

outside of the bottom

of the tank. Placement

maximizes heat pump

efficiency, and also

prevents problems

with lime and witl

Inlet prevents cold

water from mixing

efficiency and

with hot water during

draws. This increases

minimizes use of the

back-up element.

contamination of

potable water.

wraps around the

as little as possible

ensure that hot water

- Microprocessor technology in electronic models outputs steady temperatures even if flow rates vary up or down
- The best components plus excellence in manufacturing means proven reliability from the world leader
- > Stiebel Eltron tankless electric water heaters operate quietly, all electronic models are totally silent
- All models cannot dryfire and all have a highlimit switch with manual reset



Tempra® & Tempra® Plus Electronic control delivering exact temperature for whole house or multiple point-of-use





Tankless electric water heaters do not have an Energy Star label because there is no Energy Star category for them. Stiebel Eltron tankless electric water heaters have an average Energy Factor (EF) of 0.99. Use this EF to compare their energy efficiency to other water heaters, including Energy Star products.

A new energy standard for water heaters

The Department of Energy has set a new conservation standard for residential water heaters as of April 16, 2015, revising earlier standards. Part of the National Appliance and Energy Conservation Act (NAECA), the new standard applies to residential water heaters, regardless of the fuel used or if they are storage tanks or instantaneous units.

What's changed?

Some classes of water heaters have no new requirements, but other classes are changed greatly. Much higher energy efficiency standards are mandated for larger water heaters than for smaller water heaters. In the electric category, the new standard effectively prohibits 55 gallon or greater electric water heaters other than heat pump water heaters. In the gas category, the new standard may mean models must have additional insulation, flue enhancements, electronic ignition, and condensing gas technology, or a combination of these.

What do I do?

Many consequences of this change can be anticipated, but others are unknown. New water heaters will likely be larger and heavier than those they replace, and some customers may decide to upgrade sooner rather than later to capture savings. The latest news and information on the new standard will be on our website, including links to training and relevant Department of Energy and Energy Star websites.

"Standards mandatory in 2015 will save approximately 3.3 quads of energy and result in approximately \$63 billion in energy bill savings for products shipped from 2015-2044. The standard will avoid about 172.5 million metric tons of carbon dioxide emissions, equivalent to the annual greenhouse gas emissions of about 33.8 million automobiles."

Department of Energy Building Technologies Office website

Stiebel Eltron is here to partner with you.

If you have any questions regarding products, performance, or installation, call our technical support department Mon. through Fri., 8 am to 6 pm, eastern time.

800.582.8423 | info@stiebel-eltron-usa.com

www.stiebel-eltron-usa.com/DOE-2015

NAECA old and new standards for potable water residential water heaters

Product Class	Rated Storage Volume	Current Energy Factor Requirement	New Energy Factor Requirement*
Gas-fired Water Heater	20 – 55 gal	0.67	0.675
	55 – 100 gal	-	0.8012
Oil-fired Water Heater	50 gal or less	0.59	0.68
Electric Water Heater	20 – 55 gal	0.97	0.96
	55 – 120 gal	-	2.057
Tabletop Water Heater	20 gal – 100 gal	0.93	0.93
Instantaneous Gas-fired Water Heater	2 gal or less	0.62	0.82
Instantaneous Electric Water Heater	2 gal or less	0.93	0.93

^{*} There a small adjustment downwards in EF based on the size of the tank. For ease of understanding we have omitted that adjustment. See the complete standard 10 CFR 430.32(d) for all details. A link is on our website.

STIEBEL ELTRON

Simply the Best

The Family of Products from Stiebel Eltron

Hot Water Solutions



Solar Hot Water Complete solar thermal kits and components





Tankless Electric Water Heaters Whole house and pointof-use from 2 to 36 kW



Room Heating and Hand Dryers







Your distributor is:

Stiebel Eltron, Inc.

17 West Street, West Hatfield, MA 01088 413.247.3380 | 800.582.8423 | Fax 413.247.3369 info@stiebel-eltron-usa.com www.stiebel-eltron-usa.com