

New Air Conditioner Efficiency Standard

- The minimum energy efficiency standard for central air conditioning units is governed by U.S. law and regulated by the U.S. Department of Energy (DOE).
- In January 2006, the federal minimum efficiency standard for new central air conditioners made in the U.S. will be raised to 13 SEER (Seasonal Energy Efficiency Ratio) — a 30% hike from current 10 SEER standard.
- The SEER rating is the total cooling output provided by the unit during its normal annual usage period, divided by its total energy consumption during the same period.
- SEER ratings for air conditioners are similar to miles-per-gallon ratings for vehicles.

How 13 SEER Standard Impacts You

- After January 23, 2006, sales of central air conditioners rated at 10 to 12 SEER will begin to be phased out.
- 13+ SEER systems have lower operating costs. A 13 SEER air conditioning system is 30% more efficient than a 10 SEER system.
- 13+ SEER systems may feature advanced technologies to enhance efficiency, comfort, and reliability, such as scroll compressors and onboard diagnostics.
- 13+ SEER systems tend to be larger in size because more coil (tubing) is needed to achieve the system's efficiency target.
- Matching components is more important. For best operating performance and reliability in 13+ SEER systems, the indoor evaporator coil needs to be matched to work with the outdoor condenser coil.

The higher the SEER rating, the more energy efficient the central air conditioner is

13+ SEER systems cost more to purchase but will cost less to operate

Estimated Annual Operating Costs by SEER Rating

Use this table to estimate your annual electric bill savings when upgrading to a 13+ SEER system.

Air conditioner operating cost based on 3-ton unit running for national average of 1000 hours (average for 1800 – 2000-sq.- ft. home)*

SEER	\$0.08/kwh	\$0.10/kwh	\$0.12/kwh	\$0.14/kwh
8	\$360	\$450	\$540	\$630
9	\$321	\$399	\$480	\$561
10	\$288	\$360	\$432	\$504
11	\$261	\$327	\$393	\$459
12	\$240	\$300	\$360	\$420
13	\$222	\$276	\$333	\$387
14	\$207	\$258	\$309	\$360
16	\$180	\$225	\$270	\$315
18	\$159	\$201	\$240	\$279

At 8 cents/kwh, replacing an 8 SEER, 3-ton air conditioner with a new 13 SEER system can save you \$138 per year on your electric bill (\$360-\$222=\$138).

At 14 cents/kwh, replacing an 8 SEER unit with a new 13 SEER system can save you \$243 per year on your electric bill (\$630-\$387=\$243).

* \$/kwh national average is 8.5 cents/kwh. Electricity costs in California and New England run as high as 13 cents/kwh. Operating hours for an air conditioner in Florida can be as high as 3000 per season. These savings are estimates, will vary with each home, and cannot be guaranteed in any individual situation.

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Easy Energy Saving Tips for Air Conditioning Systems

- Set the thermostat at the highest comfort level
- Install and use a programmable thermostat
- Keep drapes and shades closed for windows facing the sun
- Keep doors and windows shut when the air conditioning is on
- Clean or replace the indoor unit's air filter on a regular basis
- Keep return registers/grilles clear of obstructions
- Trim shrubbery near outdoor unit to prevent airflow obstruction
- Keep the outdoor unit clean by spraying with a garden hose
- Make sure the outdoor unit is level
- Have the system inspected and serviced annually
- Use contractors whose technicians are NATE-certified