



Regional Standards

North, Southeast, and Southwest

The nation was divided into two main regions (North and South) based on the population-weighted number of heating degree days (HDD). States with 5,000 HDD or more are considered part of the northern region, while States with less than 5,000 HDD are considered part of the southern region. The Department of Energy further split the southern region into two regions:

1. “Hot-dry” Southwest region
2. “Hot-humid” Southeast region

The hot-dry region and hot-humid regions were determined based on the number of cooling operating hours and relative humidity during those operating hours per year.

Besides the different standards, why are the different regions important?

If you live in the North:

The amended standards that impact the northern region are based on the product’s **date of manufacture**. Therefore, units manufactured:

- Before January 1, 2015, have to meet the standards that were in effect before January 1, 2015.
- After January 1, 2015, have to meet these new standards.

If you live in the Southeast or Southwest:

The amended standards that impact the southern region are based on **date of installation**. Therefore, units installed on or after January 1, 2015, should meet the new standards. DOE has said that it would not penalize installers who install units manufactured prior to January 1, 2015, so your installer may, until July 1, 2016, offer to sell you a noncompliant unit that was manufactured in 2014. After July 1, 2016, however, your contractor should not install in the Southeast or Southwest any unit that does not meet the standards. ■

If you believe your air conditioner installer has installed an illegal air conditioner, you may report it to DOE at EnergyEfficiencyEnforcement@doe.gov or 202-287-6997.



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DOE • September 2014

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Save Energy, Save Money

Explaining Central Air Conditioner & Heat Pump Standards

The Department of Energy implements energy conservation standards for many appliances and equipment that we use every day—such as refrigerators, air conditioners, clothes dryers, lighting, and more. These standards save consumers billions of dollars each year in lower utility costs.

New standards will be implemented for central air conditioners

starting on January 1, 2015.

What's the background?

The Department of Energy (DOE) first implemented energy conservation standards for central air conditioners in 1992. DOE has updated the standards for air conditioners several times since then with the most recent update going into effect on January 1, 2015. For the first time, the new standards vary regionally, impacting customers living in the North, Southeast, and Southwest regions differently.

How do these new standards benefit me?

Lower utility bills

Some types of central air conditioners will have to be more efficient than previously required. New air conditioners might be more expensive, but the use of a more efficient model means you will save more on every utility bill. For example, the typical utility bill savings resulting from the regional standard in the warmest climate (hot-dry), on average, is \$320 over the lifetime of the air conditioner.

Why should I follow the rules on buying central air conditioners that meet the standards?

First, a central air conditioner meeting the new standards will save you money through lower utility bills. Second, it's the law! It is illegal for your air conditioner contractor to install a product that does not meet the regional standards in the Southeast and Southwest.

The 2015 Standards

Split-system central air conditioners installed on or after January 1, 2015, must have an energy efficiency ratio (EER) and seasonal energy efficiency ratio (SEER) no less than what is indicated in the following table:

Minimum Standards

| | North | Southeast | Southwest |
|--|-------|-----------|-----------|
| Seasonal energy efficiency ratio (SEER) | 13 | 14 | 14 |
| Energy efficiency ratio (EER) [†] | / | | 12.2 |
| Energy efficiency ratio (EER) [‡] | / | | 11.7 |

[†]Units with rated capacity of less than 45,000 Btu/h

[‡]Units with rated capacity equal to or greater than 45,000 Btu/h

In addition to the regional standards for split-system central air conditioners, DOE also adopted new efficiency standards for other types of central air conditioners, as well as heat pumps. Units manufactured on or after January 1, 2015, must meet the following standards:

| Product Class | SEER | * HSPF |
|------------------------------------|------|--------|
| Split-System Heat Pumps | 14 | 8.2 |
| Split-Package Air Conditioners | 14 | |
| Split-Package Heat Pumps | 14 | 8.0 |
| Small-Duct, High-Velocity Systems | 12 | 7.2 |
| Space-Constrained Air Conditioners | 12 | |
| Space-Constrained Heat Pumps | 12 | 7.4 |

* HSPF is the Heating Seasonal Performance Factor. The higher the HSPF rating, the less electrical energy your heat pump uses to heat your home.

50 Million Metric Tons

The estimated number of carbon dioxide emissions that will be avoided as a result of these new standards for central air conditioners.

What is an energy efficiency ratio (EER)?

An air conditioner's peak load efficiency is measured by the energy efficiency ratio (EER). The EER is the ratio of the cooling capacity (in British thermal units [Btu] per hour) to the power input (in watts) at 95 °F. EER is especially important in hot-dry climates, which experience more high-temperature days requiring air conditioners to work harder cooling your home.

What is a seasonal energy efficiency ratio (SEER)?

The seasonal energy efficiency ratio (SEER) is the ratio of the total heat removed from the conditioned space during the annual cooling season divided by the total electrical energy consumed by the air conditioner during the same season. So, the higher the SEER rating, the less electrical energy your air conditioner uses to cool your home. Purchasing an air conditioner with a higher SEER rating could be more expensive, but save you more money on your electricity bill.

