**Figure 1.** *Source: Department of Energy*

## Amended Energy Conservation Standards
### for Furnace, Central Air Conditioner, and Heat Pump Energy Efficiency

**Residential Furnaces***

| PRODUCT CLASS | NATIONAL STANDARDS | NORTHERN REGION** STANDARDS |
|---|---|---|
| Non-weatherized gas | AFUE = 80% | AFUE = 90% |
| Mobile home gas | AFUE = 80% | AFUE = 90% |
| Non-weatherized oil-fired | AFUE = 83% | AFUE = 83% |
| Weatherized gas | AFUE = 81% | AFUE = 81% |
| Mobile home oil-fired‡‡ | AFUE = 75% | AFUE = 75% |
| Weatherized oil-fired‡‡ | AFUE = 78% | AFUE = 78% |
| Electric‡‡ | AFUE = 78% | AFUE = 78% |

**Central Air Conditioners and Heat Pumps†**

| PRODUCT CLASS | NATIONAL STANDARDS | SOUTHEASTERN REGION†† STANDARDS | SOUTHWESTERN REGION‡ STANDARDS |
|---|---|---|---|
| Split-system air conditioners | SEER = 13 | SEER = 14 | SEER = 14<br>EER = 12.2 (for units with a rated cooling capacity less than 45,000 Btu/h)<br>EER = 11.7 (for units with a rated cooling capacity equal to or greater than 45,000 Btu/h) |
| Split-system heat pumps | SEER = 14<br>HSPF = 8.2 | SEER = 14<br>HSPF = 8.2 | SEER = 14<br>HSPF = 8.2 |
| Single-package air conditioners‡‡ | SEER = 14 | SEER = 14 | SEER = 14<br>EER = 11.0 |
| Single-package heat pumps | SEER = 14<br>HSPF = 8.0 | SEER = 14<br>HSPF = 8.0 | SEER = 14<br>HSPF = 8.0 |
| Small-duct, high-velocity systems | SEER = 13<br>HSPF = 7.7 | SEER = 13<br>HSPF = 7.7 | SEER = 13<br>HSPF = 7.7 |
| Space-constrained products — air conditioners‡‡ | SEER = 12 | SEER = 12 | SEER = 12 |
| Space-constrained products — heat pumps‡‡ | SEER = 12<br>HSPF = 7.4 | SEER = 12<br>HSPF = 7.4 | SEER = 12<br>HSPF = 7.4 |

* AFUE is annual fuel utilization efficiency.

** The Northern region for furnaces contains the following states: Alaska, Colorado, Connecticut, Idaho, Illinois, Indiana, Iowa, Kansas, Maine, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, Vermont, Washington, West Virginia, Wisconsin, and Wyoming.

† SEER is Seasonal Energy Efficiency Ratio; EER is Energy Efficiency Ratio; HSPF is Heating Seasonal Performance Factor; and Btu/h is British thermal units per hour.

†† The Southeastern region for central air conditioners and heat pumps contains the following states: Alabama, Arkansas, Delaware, Florida, Georgia, Hawaii, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia, and the District of Columbia.

‡ The Southwestern region for central air conditioners and heat pumps contains the states of Arizona, California, Nevada, and New Mexico.

‡‡ DOE is not amending energy conservation standards for these product classes in this rule.

**Figure 2.** *Source: Department of Energy*

## Amended Energy Conservation Standards
### for Furnace, Central Air Conditioner, and Heat Pump Standby Mode and Off Mode*

**Residential Furnaces****

| PRODUCT CLASS | STANDBY MODE AND OFF MODE STANDARD LEVELS |
|---|---|
| Non-weatherized gas | $P_{W,SB}$ = 10 watts<br>$P_{W,OFF}$ = 10 watts |
| Mobile home gas | $P_{W,SB}$ = 10 watts<br>$P_{W,OFF}$ = 10 watts |
| Non-weatherized oil-fired | $P_{W,SB}$ = 11 watts<br>$P_{W,OFF}$ = 11 watts |
| Mobile home oil-fired | $P_{W,SB}$ = 11 watts<br>$P_{W,OFF}$ = 11 watts |
| Electric | $P_{W,SB}$ = 10 watts<br>$P_{W,OFF}$ = 10 watts |

**Central Air Conditioners and Heat Pumps†**

| PRODUCT CLASS | OFF MODE STANDARD LEVELS†† |
|---|---|
| Split-system air conditioners | $P_{W,OFF}$ = 30 watts |
| Split-system heat pumps | $P_{W,OFF}$ = 33 watts |
| Single-package air conditioners | $P_{W,OFF}$ = 30 watts |
| Single-package heat pumps | $P_{W,OFF}$ = 33 watts |
| Small-duct, high-velocity systems | $P_{W,OFF}$ = 30 watts |
| Space-constrained air conditioners | $P_{W,OFF}$ = 30 watts |
| Space-constrained heat pumps | $P_{W,OFF}$ = 33 watts |

* $P_{W,SB}$ is standby mode electrical power consumption, and $P_{W,OFF}$ is off mode electrical power consumption. For furnaces, DOE is proposing to change the nomenclature for the standby mode and off mode power consumption metrics for furnaces from those in the furnace and boiler test procedure final rule published on October 20, 2010. 75 FR 64621. DOE is renaming the $P_{SB}$ and $P_{OFF}$ metrics as $P_{W,SB}$ and $P_{W,OFF}$, respectively. However, the substance of these metrics remains unchanged.

** Standby mode and off mode energy consumption for weatherized gas and oil-fired furnaces is regulated as a part of single-package air conditioners and heat pumps.

† $P_{W,OFF}$ is off mode electrical power consumption for central air conditioners and heat pumps.

†† DOE is not adopting a separate standby mode standard level for central air conditioners and heat pumps, because standby mode power conumption for these products is already regulated by SEER and HSPF.