



Eligibility for Recognition Refrigerator-Freezers

Scope

Included products: Full-size refrigerator-freezers are eligible for Most Efficient recognition in 2011.

Excluded products: The following products are not eligible for Most Efficient recognition in 2011:

- Compact models. Any refrigerator, refrigerator-freezer or freezer with total volume less than 7.75 cubic feet (220 liters rated volume as determined in Appendix A1 and B1 of 10 CFR 430 subpart B) and 36 inches (0.91 meters) or less in height
- Freezers. At the present time, freezers are not eligible for Most Efficient recognition.
- All-refrigerators. At the present time, all-refrigerators are not eligible for Most Efficient recognition.

Recognition Criteria

1) Product must be ENERGY STAR qualified consistent with applicable ENERGY STAR Partner Commitments and the requirements set forth in the ENERGY STAR Program Requirements Product Specification for Residential Refrigerators and Freezers, Version 4.1. Product performance must be certified by an EPA-recognized Certification Body.

2) Product must use less than or equal to 422 kWh per year and be at least 30% more efficient than federal requirements (see table below), as determined by ENERGY STAR specified federal test procedures.

Product Class		Maximum Annual Energy Use (kWh/year)
1	Refrigerator & Refrigerator-Freezer with manual defrost	$AV \leq 40.2, E_{ann} \leq 6.17 \cdot AV + 173.9$ $AV > 40.2, E_{ann} \leq 422$
2	Refrigerator-Freezer with partial automatic defrost	
3	Top-Mount Freezer without through-the-door ice	$AV \leq 33.4, E_{ann} \leq 6.86 \cdot AV + 193.2$ $AV > 33.4, E_{ann} \leq 422$
4	Side-Mount Freezer without through-the-door ice	$AV \leq 19.4, E_{ann} \leq 3.44 \cdot AV + 355.3$ $AV > 19.4, E_{ann} \leq 422$
5	Bottom-Mount Freezer without through-the-door ice	$AV \leq 31.3, E_{ann} \leq 3.22 \cdot AV + 321.3$ $AV > 31.3, E_{ann} \leq 422$
5a	Bottom-Mount Freezer with through-the-door ice	$AV \leq 12.8, E_{ann} \leq 3.50 \cdot AV + 377.3$ $AV > 12.8, E_{ann} \leq 422$
6	Top-Mount Freezer with through-the-door ice	$AV \leq 24.2, E_{ann} \leq 7.14 \cdot AV + 249.2$ $AV > 24.2, E_{ann} \leq 422$
7	Side-Mount Freezer with through-the-door ice	$AV \leq 19.5, E_{ann} \leq 7.07 \cdot AV + 284.2$ $AV > 19.5, E_{ann} \leq 422$

AV = Adjusted Volume in cubic feet. A refrigerator's adjusted volume is equal to its fresh volume + (1.63 x Freezer Volume). This adjustment factor assures that differences in freezer size are taken into account when determining refrigerator energy consumption limits.

Recognition Period

Upon notification from an ENERGY STAR Partner, EPA will add qualifying models to the 2011 Most Efficient product list for refrigerators from May 5, 2011 through December 31, 2011. The 2011 Most Efficient designation may be used in association with models recognized during this period for as long as the model remains on the market.