2023 - SEER2 New Efficiency Standards

What does "SEER2" mean?

The Department of Energy (DOE) is changing the way HVAC systems are tested. New M1 testing procedures are thorough, demanding a lower SEER2 equipment rating and thus paving the way for a more sustainable future.

About SEER2

"SEER2" stands for Seasonal Energy Efficiency Ratio 2. Specifically, SEER2 is the total heat removed from the conditioned space during the annual cooling season. The new M1 testing procedure will increase systems' external static pressure by a factor of five to better reflect field conditions of installed equipment.

M1 Testing Requirements

To meet new testing requirements, manufacturers are redesigning system components. In fact, all air conditioning and heat pump systems must be renovated by January 1, 2023, even if they meet current SEER ratings. In addition, matching components such as furnaces and air handlers will be redesigned to meet changes in the airflow setpoint. Depending on your region, additional field install equipment, such as Thermal Expansion Valves (TXVs), may also be required.

M1 Testing Procedures

The goal of new SEER2 testing procedures is to better represent external conditions seen in the field. Current SEER testing does not accurately emulate the influence of ductwork and external static pressure on HVAC products. Because of this, it is not often representative of real-world applications. By increasing systems' external static pressure from current SEER (0.1 in. of water) to SEER2 (0.5 in. of water), new M1 testing procedures more accurately reflect current field conditions.

North Region Regulations - System Requirements

For contractors in the north region, compliance is determined by each system's manufacturing date. This allows ample time to sell 13.0 SEER inventory.

To meet SEER2 requirements in this region, residential central air systems must have a SEER2 rating of 13.4. In addition, heat pumps in any region must meet 14.3 SEER2 and 7.5 HSPF2 requirements.

	SEER	SEER2	HSPF	HSPF2
AC Systems	14.0	13.4		
Heat Pump Systems	15.0	14.3	8.8	7.5
Single Packaged Systems	14.0	13.4	8.0	6.7