SEER™ Technical Overview for Dealers



So efficient, even the outdoor unit gets a boost.



Tough on the outside. Very well designed on the inside.

Tappan's new two-stage iSEER™ furnaces have an extra benefit - they also boost cooling efficiency by up to 1 SEER point. This extra energy savings is thanks to a highly efficient brushless DC motor. Of course, iSEER isn't the only cool thing about Tappan's new furnace lineup. To see all the new installation and comfort features, visit www.tappan.net or contact your distributor.



iSEER is available in these reliable Tappan models.

Models can be vented horizontally or vertically and come in upflow and downflow configurations.

80% AFUE two-stage fixed-speed

80% AFUE two-stage variable-speed





95.1% AFUE two-stage fixed-speed

95.1% AFUE two-stage variable-speed





97+% AFUE iQ Drive® fully modulating upflow furnace





THE TECHNOLOGY BEHIND THE SEER.

Tappan's iSEER is possible because of the ultra-high efficiency, microprocessor-controlled brushless DC motor utilizing proven ECM (Electronically Commutated Motor) technology in conjunction with advanced controls developed specifically for this application. When paired with a matched 13- or 14-SEER outdoor unit, Tappan iSEER two-stage furnaces can increase SEER up to one point. No additional kits are needed.

MOTOR COMPARISON CHART

	PSC	GE X13 (Regal-Beloit)	GE ECM (Regal-Beloit)	Fixed Speed	Variable Speed
Technology	Induction Motor	Brushless DC	Brushless DC	Brushless DC	Brushless DC
Speeds	1 to 4	5	8 heating 12 cooling	16 heating 16 cooling	8 heating 16 cooling
Speed Range (RPM)	800-1100	600-1100	300-1200	350-1350	350-1350
Climate Profiles	No	No	Yes	Yes	Yes
Intelligent Controls	No	Constant torque	Constant airflow	Constant torque	Constant airflow
Peak Motor Efficiency	59%	80%	80%	80%	80%
iQ Drive® Ready	No	No	No	No	Yes
Summary	No features, base product	Limited features, high efficiency	Full features, maximum efficiency	Limited features, high efficiency	Full features, maximum efficiency

The Tappan product line features the above motors on various products.

Tappan two-stage and modulating gas furnaces exclusively feature iSEER products.

iSEER makes servicing a snap.

iSEER offers you benefits beyond efficiency. The moisture-resistant controller is easy to access. Unlike other ECM motors, iSEER has its electronic controller separate from the motor to increase serviceability.



Here are some other important features of Tappan's iSEER furnaces:

- **Unmatched flexibility** fixed-speed, two-stage furnaces featuring iSEER can be easily upgraded to variable-speed iSEER by changing a control board. There is no need to remove the blower housing.
- **Sound reduction** the iSEER three-phase motor design produces a very low torque wave. Because the motor ramps up to speed, it minimizes the abrupt change in sound found when an induction (PSC) motor cycles on and off.
- **Self-adapting airflow** on variable-speed models, Tappan's constant flow technology (patent pending) can be modified to deliver constant airflow into a broad range of external

pressures in an air distribution system. And with iSEER, there is no need for external sensors.

- **Improved air distribution** with the constant airflow provided by variable-speed iSEER, air distribution is improved throughout the static pressure range, which helps compensate for restrictive ducts.
- **Improved indoor air quality** when run on low-speed constant fan and in combination with high efficiency air filters, variable-speed iSEER models reduce hot and cold spots in the home.

iSEER is just one cool part of the new Tappan furnace lineup.

At just under 35 inches tall, the new line of Tappan furnaces gets right down to business. They've been completely rethought, from the inside out, with features that make them incredibly easy to service even with the smaller size. Plus, an attractive appearance, sound reduction and a brand name homeowners trust make them just as easy to sell.

Tappan furnaces are available in the following models. Most can be vented horizontally or vertically and come in upflow and downflow configurations.

80% AFUE single-stage, fixed-speed 80% AFUE two-stage fixed-speed (iSEER) 80% AFUE two-stage variable-speed (iSEER, iQ Drive Ready) 92.1% AFUE single-stage, fixed-speed 95.1% AFUE two-stage fixed-speed (iSEER) 95.1% AFUE two-stage variable-speed (iSEER, iQ Drive Ready, ecoLogic) 97+% AFUE iQ Drive fully

modulating (iSEER, iQ Drive Ready, ecoLogic)

Find out what the new Tappan furnaces can do for you. Visit www.tappan.net or contact your distributor to learn more.



iQ Drive Ready furnaces are fully compatible with the 23-SEER iQ Drive air conditioning system. No additional kits are needed.

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www.tappan.net

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