

TECH **3** SERIES

FURNACES  
Two-Stage, Variable-Speed



TOUGH.  
SMART.  
TAPPAN.™



**TAPPAN**

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## The Military Wanted Tank-Tough. They Got It.

Tappan's reputation for tough, durable products was, in the beginning, cast in iron. In 1881, in Bellaire, Ohio, W. J. (Bill) Tappan sold his wood- and coal-



burning stoves door-to-door from a horse-drawn wagon. But it wasn't until World Wars I and II, when Tappan supplied cooking equipment to the U.S. armed forces, that the name gained well-deserved national recognition.

The Tappan name has always stood for appliances that are durable and innovative. Tappan's introduction of the microwave in 1955 revolutionized cooking. Then, just five years later, pilot lights in furnaces and stoves became a thing of the past with Tappan's invention of electronic ignition.

Today, our line of heating and cooling equipment is still just as solidly-built as our tank-tough stoves built for the military in World War I and II. In fact, our furnaces are backed with an all-parts warranty good for 8 years, with either a 20-year or lifetime warranty on the heat exchanger. Even more, they're Tappan Smart. Packed with precision-engineered components that deliver extended service life, plus state-of-the-art efficiency and comfort.

## Tough, Because We're Tough On Ourselves.

When you purchase a Tappan furnace, you can be confident it's passed the toughest manufacturing standards in the industry: Ours. By the end of the line, each piece of equipment will undergo 234 inspections. Rigorous as this process is, all equipment will then have to perform to spec at our automated computer-testing station.

It's part of a unique quality control program called Demand Flow Technology™ (DFT), where consistency and workflow achieve near-zero tolerance for imperfection. Associates are trained in multiple workstation skill sets so they can check assembly from the preceding station, double-check their own work, then pass it on. Then in the exceedingly small likelihood there may be a defect, all units and each component (both mechanical and electrical) are 100% fired and tested on the line.

In the final balance, we stand behind quality workmanship because we do more to stand watch over it.



## The Tappan Tough™ Quality Pledge.

Because Tappan equipment is built-tough for the long run, the most critical heating component—the heat exchanger—is backed by the Tappan Tough™ Quality Pledge. We'll replace your Tappan



furnace should the heat exchanger fail during the first five years of ownership. For even greater peace of mind, internal working parts of every Tappan unit are covered by a limited warranty for replacement up to 8 full years.

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## Tech3™ Series Performance. Strictly Top-Of-The-Line.



Tappan's Tech3 Series furnaces are up-to-speed with the expectations of today's comfort-minded and energy-conscious consumer. Providing the latest two-stage, variable-speed technology, it stands to reason that these furnaces will cost more up front. But over the lifetime of your initial investment, they'll provide unparalleled comfort, the quietest operation, and significant improvements in indoor air quality.

Likewise, they'll pay back dividends providing energy savings worth hundreds of dollars per year along with reduced maintenance costs.



## Two-Stage Technology That Quietly Up-Stages The Rest.

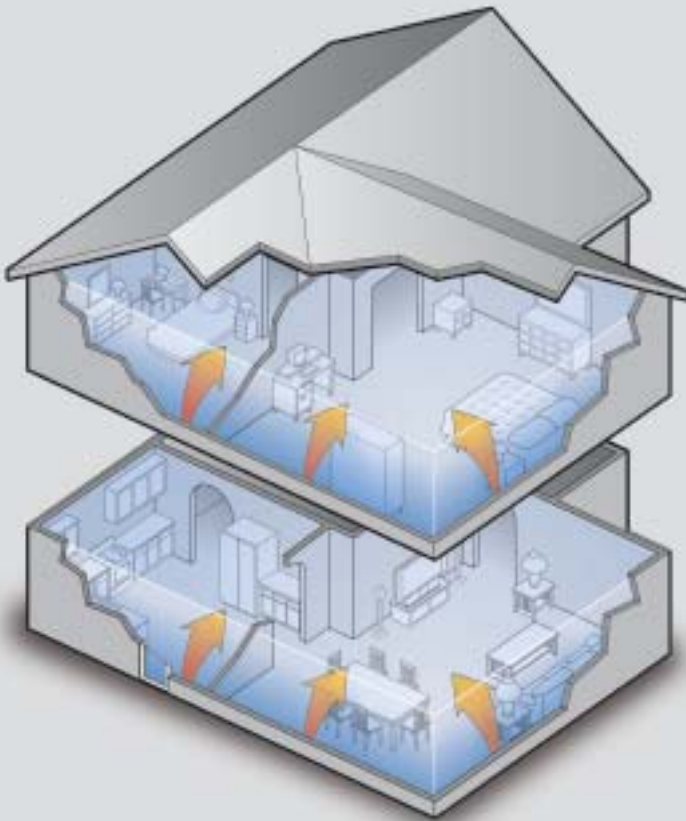
On mild days, which statistically average about 80% of the heating season, a furnace that idles down to a reduced-heating capacity improves comfort.

Tappan's innovative two-stage furnaces with blowers powered by variable-speed motors, are built with this purpose in mind. In the first stage, or low-fire mode, these furnaces use approximately 68% of their total heating capacity running more slowly, quietly and efficiently. Then, during colder extremes—when maximum

output is finally needed—a second stage boosts fuel flow while the blower ramps up variably to maximum speed. Ramping gradually through heating cycles increases quiet performance.

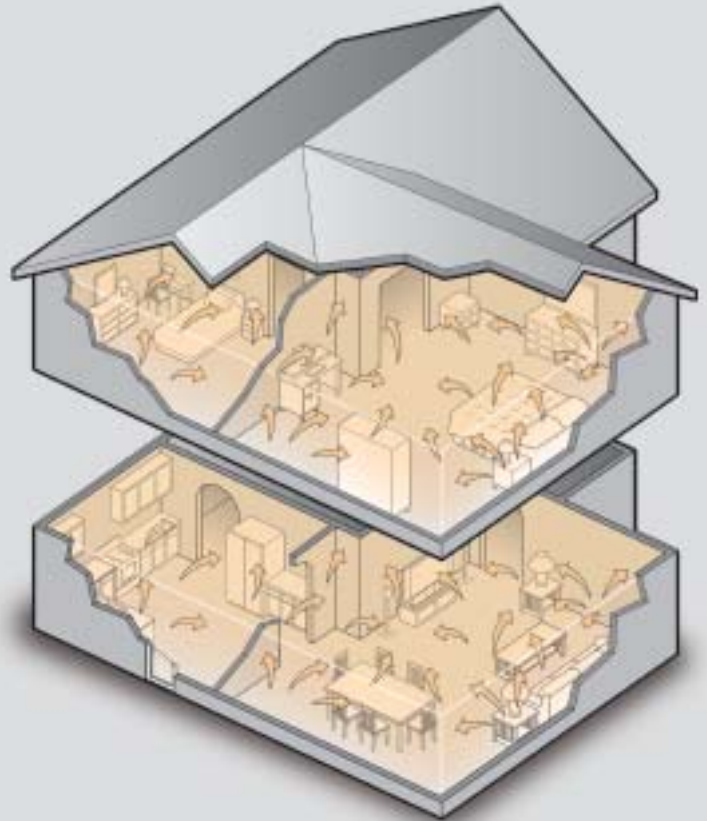
Since air is circulated at longer cycles more continuously, room temperatures are balanced and more comfortably mixed. Temperature swings are reduced to barely a couple of degrees and hot and cold spots are minimized.

### Fixed Speed vs. Variable Speed



#### Conventional fixed speed system shuts on and off at full output only

- Uses more energy
- Creates uncomfortable temperature swings
- Produces hot and cold spots
- More contaminants in air due to less filtration
- Reduced humidity control

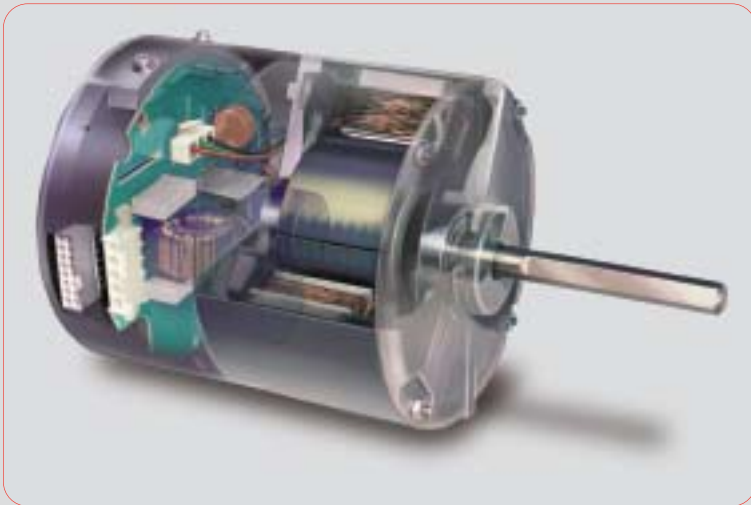


#### Advanced variable speed system runs continuously adjusting output to match conditions

- Uses less energy
- Ramps up gently eliminating uncomfortable temperature swings
- Eliminates noisy on/off cycles
- Continuous air flow improves filtration and humidity control
- Balances temperatures and minimizes hot and cold spots

## Breathe Easy, Save Big.

Running a furnace continuously on a thermostat's "fan setting" has obvious benefits. Besides optimizing indoor air comfort, Tappan's Tech3 Series furnaces, use 80% less electricity over conventional furnaces. Ultimately, this can add up to hundreds of dollars in savings each year. So you can breathe easier, especially when utility bills come due.



**GE ECM™ variable-speed motor can save \$150/yr. on heating plus another \$240 in electrical costs for continuous fan operation**

Compared to conventional blower motor based on average savings calculations at 8¢/kwh. Actual savings may vary according to utility rates, climate, ductwork, insulation, duty cycle, and lifestyle usage patterns.



### 3-Year Heating Savings

Tech3 92.1% and 80% AFUE unit vs. 65% AFUE units

Dollar amounts computed on natural gas costs at \$.092 ccf, for 2,000 full-load heating hours and a system rated at 60,000 Btuh. Actual savings may vary depending on climate conditions, fuel rates, and patterns of usage.

## Energy Definitions

### AFUE—Annual Fuel Utilization Efficiency

It measures the amount of heat actually delivered to your house compared to the amount of fuel that you must supply to the furnace. Thus, a furnace that has an 80% AFUE rating converts 80% of the fuel that you supply to heat—the other 20% is lost out of the chimney. As ratings increase, so does unit efficiency.

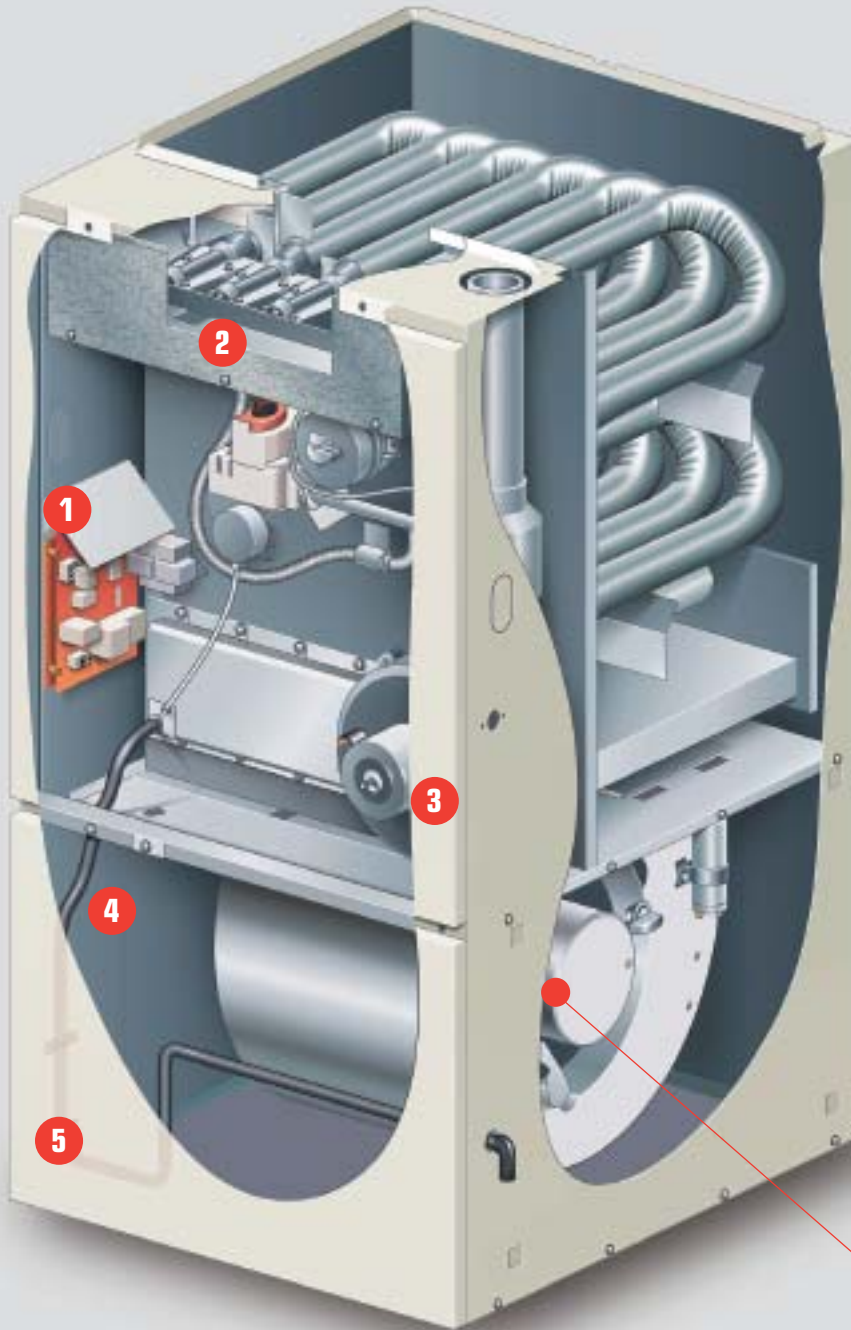
## Helping To Save Mother Earth.

Awarded by the U.S. Department of Energy and the Environmental Protection Agency for helping to conserve energy, promote cleaner air, and prevent global warming.

To qualify, furnaces must have an Annualized Fuel Utilization Efficiency (AFUE) rating of 90% or higher.



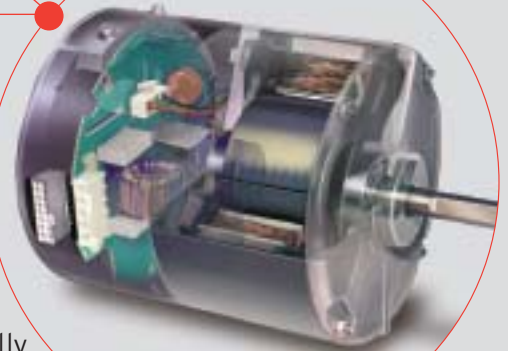
## Taking Tough And Smart To The Nth Degree.



**Two-stage, variable-speed technology provides maximum efficiency with improved comfort, indoor air quality and humidity control**

- 1 SmartLite® control board programs igniter to adapt to furnace's heat-up characteristics extending igniter life
- 2 Multiport, in-shot burner design and location of inducer and air vents assures cleaner, more-efficient combustion
- 3 Galvanized steel cabinet for added strength and durability
- 4 Fully insulated cabinet and blower compartment for quieter operation
- 5 Silicone-polyurethane finish provides superior scratch and corrosion resistance for looks that last

- GE ECM™ variable-speed motor with built-in speed and torque controls adjust to meet airflow requirements more efficiently and quietly
- ECM variable-speed motor's efficiency can save hundreds of dollars annually compared to blowers with standard induction motors
- ECM variable-speed motor provides longer, trouble-free operation preventing excessive motor wear caused by abrupt stop/start-up cycles
- ECM motor maintains factory-calibrated airflow capacity automatically compensating for reduced duct volume, dirty air filters, zoning changes, obstructed supply register, etc.





**Tech3 Series 92.1/90 VS-2**  
92.1/90 AFUE Ultra High Efficiency



**Tech3 Series 80+ VS-2**  
80+ AFUE Extra High Efficiency



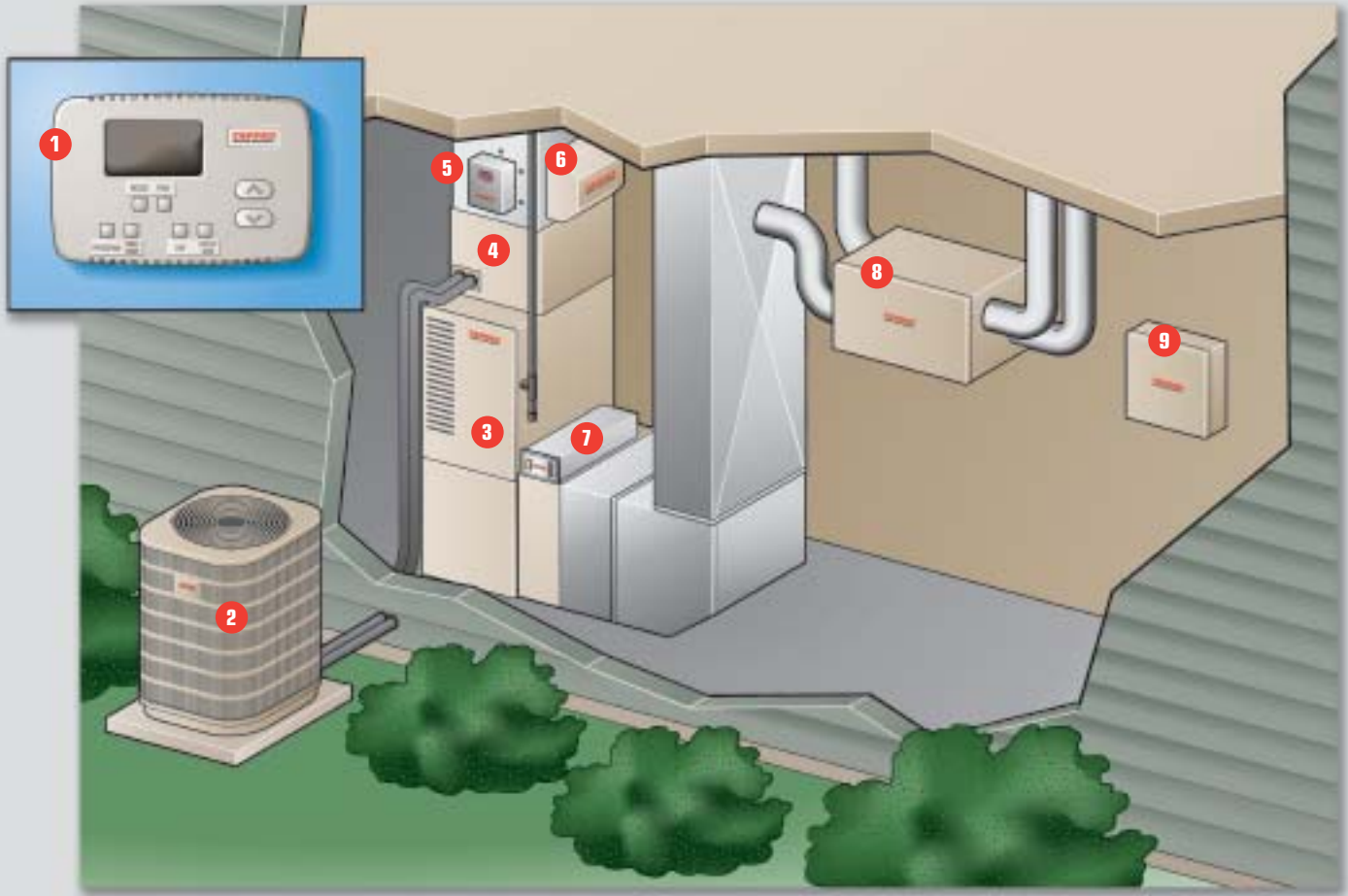
### **Two-Stage Gas Furnace with Variable-Speed Blower**

- Integrated Comfort Systems Efficiency (When matched with selected air conditioners and heat pumps, efficiencies maximized with SEER ratings up to 16 and HSPF ratings up to 8.5)
- Exceptional Warranty—8-Year Limited Parts Warranty/5-year Tappan Tough™ Quality Pledge/Extended Warranty Available



## Putting It All Together With Quality Service.

To learn how you can get the most comfort—and biggest return in energy savings from a totally integrated indoor comfort system, talk to your Tappan dealer. From thermostats, to air cleaners, matched coils for new condensing units, humidity and zone control systems, and other indoor air quality accessories, you're sure to get tough, dependable technology that's built to last. All of which makes you one very smart customer. Tough. Smart. Tappan.™



1 Programmable thermostat

2 Air conditioner or heat pump

3 Gas furnace or air handler

4 Evaporator coil

5 UV air purifier

6 Humidifier

7 Air cleaner

8 Energy recovery ventilator

9 Zone control panel

**TAPPAN**  
Heating and Cooling Products

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### Testing Certifications



PUBLICATION SERIAL #716B-0904  
Specifications and illustrations subject  
to change without incurring obligation.  
Pictured installation varies per household.