

Trane Air Conditioners

Indoor Coils and Heat Pumps

Why choose a Trane High Efficiency Air Conditioner and Coil or Heat Pump system for your home?

Proven Performance, Proven Reliability, Proven Quality!

All air conditioners and heat pumps provide cooling. However Trane air conditioners and heat pumps have years of proven superior engineering over the competition. This has resulted in Trane air conditioners consistently outperforming and outlasting other brands.

Lets look at a few things that Trane does differently when it comes to air conditioners, coils and heat pumps.

Aluminum Coils

One of the first things you notice when you look inside a Trane air conditioner, Trane heat pump or Trane coil cabinet is that the coils are all aluminum with a Spine Fin around the aluminum tubing. The reason that Trane uses aluminum tubing is that aluminum tubing is 5 times more resistant to corrosion than copper tubing. This increases the lifespan of your equipment significantly, either within the indoor coil section where there is constant moisture, or on the outdoor unit that is exposed to weather elements all the time.

On the indoor cased coil and the outdoor air conditioner graphic, at right, you can see the all aluminum coil tubing. The all aluminum coil tubing in Trane's air conditioners, heat pumps and evaporator coils is one distinct difference from competitors in Trane products.

The The Spine Fin® Difference: A Leak Resistant Design

Trane uses a patented Spine Fin Technology as opposed the the "Plate Fin" technique that is used by the competitors. Here are the reasons why.

Trane Coil Technology Features One-Third The Number Of Brazed Joints.



It's Hard To Stop A Trane.®



Trane Cased Coil



Trane Outdoor Unit



Trane Spine Fin®



Trane's Unique Aluminum to Copper Transition Joint

Spine Fin has an extremely low leak potential. Coils are more prone to leaking at joints, and Spine Fin with **Woven Coil Technology** has far fewer joints than plate fin. That's because Spine Fin tubing is manufactured in continuous lengths. Brazed connections are required only at the coil (or circuit) inlet and outlet.

Elimination of end-turns used in copper tube plate fin designs permits a dramatic reduction in brazed joints and potential leaks in this design. Of course fewer leaks increases system reliability and durability. This also means a longer compressor life, because the introduction of moisture and contaminants into the sealed system is prevented.

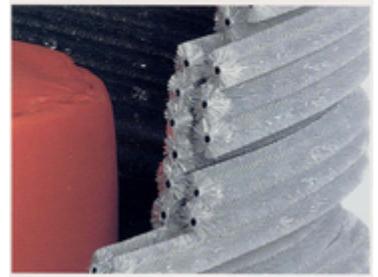
In contrast, plate fin coils are made by stacking flat fins on parallel tubes. Each tube pair requires an end-turn to complete the refrigerant circuit. A typical 2.5 ton air conditioner or heat pump requires 30 or more brazed joint connections. A modern Trane unit of the same size requires about 10 joints or a third of the joints. **Plate fin coils have three times the leak potential over Trane Spine Fin Technology.**

Woven coil technology is the newest generation of Spine Fin. The woven coil design weaves a continuous roll of Spine Fin in a layered configuration, creating an even greater surface area. This greater surface area results in increased efficiency and a reduced cabinet size.

How Does Spine Fin® Prevent Efficiency Loss?

- It is designed for leak resistance.
- It is made with corrosion resistant materials and innovative construction techniques.
- It is housed in an enclosed, protective cabinet. And, it is cleanable.
- On-going research and development keep Spine Fin on the

Trane's Woven Coil Technology Leads To Even Greater Efficiencies.



Trane's Woven Coil Technology

eliminates unneeded welded joints by
70%- welded joints are where most leaks occur in any coil



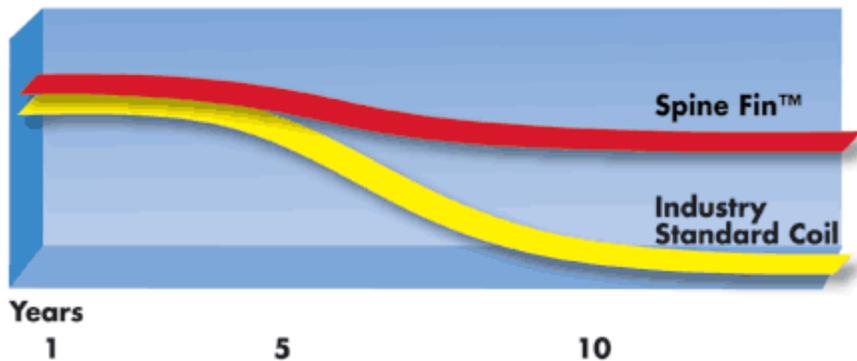
Trane uses aluminum fins over aluminum tubing-

very corrosion resistant



Trane Coil- Note the minimal use of copper components

leading edge.



Trane minimizes coil corrosion with all aluminum coils
The indoor coil made by most other HVAC manufacturers is copper with aluminum plate fin over the copper. This type of coil and fin combination is five times more likely to corrode as opposed to Tranes Spine Fin Technology which is aluminum coil surrounded by aluminum fin. **Trane coils are all aluminum, both the tubing and the Spine Fin around the tubing.** Make no mistake, all coils will corrode. Trane has just managed to slow the process through the use of aluminum tubing and aluminum Spine Fin technology.

If you don't have a Trane Coil- Whenever you look at inside your indoor coil note that although the *copper coil portion* is corroded and discolored, the *aluminum fin portion* is much cleaner. Aluminum is more resistant to corrosion because it oxidizes and continually provides a protective layer against damage caused by moisture and other adverse conditions. Copper corrodes and falls away, leaving the copper vulnerable as new layers of copper become exposed.

Purdue University Study

Most recently, a study conducted at the Ray Herrick Laboratories of Purdue University in 2001, showed that a typical system's efficiency degrades twice as much with enhanced plate fin versus Spine Fin® when a three to four-year buildup of graded dust is present. Even in the event that Spine Fin® is loaded with more particulate than enhanced plate fin, more system efficiency is retained with Spine Fin.® This study proves the fact that surface loading and clogging are not typical to Spine Fin.®

**The Purdue Study:
Spine Fin To Plate Fin Performance Comparison.**

Fact: All coils lose efficiency over time
Fact: Plate Fin coils lose more efficiency than Spine Fin and cost more to operate.

Energy Use Penalty Due To Contaminated Condenser Surfaces In 3 Ton 10 SEER Systems (1500 hrs/year operation)



NOTE: The energy use penalty is 61% higher for the plate fin surface (cumulative over 5 years).

Weatherguard™ II Top



- Standard on all XL-Series Air Conditioners
- Withstands 1,440 hours of 194o desert heat
- Withstands 100 ft/lbs of impact in -35o Arctic cold
- Withstands a 300-pound load
- Withstands the impact of a 90 mph fastball
- Designed and built to last

Duratuff™ Basepan

- Molded-in-color will not fade
- Won't crack, warp, corrode or rust
- Withstands a 800-pound load
- Withstands 20-year accelerated heat test conducted at 13 Degrees



Trane Integrated Steel Cabinet



- Powder painted louvered panels
- Full coil protection
- G90 galvanized steel construction
- Interlocking seams create a tight fit and finish
- X-brace construction enhances cabinet stability
- Recessed screws, rounded edges and integrated panels make our outdoor products safe for any backyard



What Is ENERGY STAR®?

Natural Resources Canada's (NRCan's) Office of Energy Efficiency (OEE) promotes the international ENERGY STAR symbol in

Canada and monitors its use. Major manufacturers and retailers of energy-efficient products, utilities and energy retailers, and interest groups from Australia to Europe recognized the benefits of ENERGY STAR to consumers and have joined in promoting the symbol.

ENERGY STAR is the international symbol of premium energy efficiency. Products that display the ENERGY STAR symbol have been tested according to prescribed procedures and have been found to meet or exceed higher energy efficiency levels without compromising performance.

Trane XL20i- Series Air Conditioner Premium Ultra Efficiency up to 20.0 SEER



Trane Ultra Efficiency XL20i AIR CONDITIONER

- ENERGY STAR® qualified
- Up to 20.00 SEER cooling efficiency
- Dual (Two) Climatuff® compressors
- Comfortlink II™ control board
- Charge Assist™ charging
- Full-sided louvered panels
- Power-paint finish
- Weatherguard™ fasteners
- All-aluminum Spine Fin™ coil
- Duratuff™ rustproof basepan
- Compressor sound insulator
- Weatherguard II™ top
- Integrated fan system



[CLICK FOR DETAILS ON TRANE XL20i](#)

Trane XL16i- Series Two-Stage Air Conditioner Ultra Efficiency up to 17.15 SEER



Trane Ultra Efficiency XL16i AIR CONDITIONER

- ENERGY STAR® qualified
- Up to 17.15 SEER cooling efficiency
- 2 stage Climatuff® compressor
- Comfortlink II™ control board
- Charge Assist™ charging
- Full-sided louvered panels
- Power-paint finish
- Weatherguard™ fasteners
- All-aluminum Spine Fin™ coil
- Duratuff™ rustproof basepan
- Compressor sound insulator
- Weatherguard II™ top
- Integrated fan system



[CLICK FOR DETAILS ON TRANE XL16i](#)

Trane XL15i- Series Air Conditioner Super Efficiency up to 16.0 SEER



Trane Super Efficiency XL15i AIR CONDITIONER

- ENERGY STAR® qualified
- Up to 16.00 SEER cooling efficiency
- Climatuff® compressor
- Full-sided louvered panels
- Power-paint finish
- Weatherguard™ fasteners
- All-aluminum Spine Fin™ coil™ coil
- Duratuff™ rustproof basepan
- Compressor sound insulator
- Weatherguard II™ top
- Integrated fan system



[CLICK FOR DETAILS ON TRANE XL15i](#)

Trane XR15 Series Air Conditioner High Efficiency up to 17.0 SEER



**Trane High Efficiency
XR15 AIR CONDITIONER**

- ENERGY STAR® qualified
- Up to 17.00 SEER cooling efficiency
- Climatuff® compressor
- Full-sided louvered panels
- Power-paint finish
- Corrosion-Resistant fasteners
- All-aluminum Spine Fin™ coil
- Duratuff™ rustproof basepan
- Compressor sound insulator



[CLICK FOR DETAILS ON TRANE XR15](#)

Trane XR13 Series Air Conditioner High Efficiency up to 14.0 SEER



Trane High Efficiency XR13 AIR CONDITIONER

- Up to 14.00 SEER cooling efficiency
- Climatuff® compressor
- Full-sided louvered panels
- Power-paint finish
- Corrosion-Resistant fasteners
- All-aluminum Spine Fin™ coil
- Duratuff™ rustproof basepan
- Compressor sound insulator

[CLICK FOR DETAILS ON TRANE XR13](#)

Trane Comfort Coils



Trane Comfort Coils

- **Foil Insulation**
- 100% foil insulation provides easy cleaning and quiet operation.
- **Two-way, Sloped, Non-Corrosive Drain Pan**
- Prevents standing water in drain pan, which significantly affects indoor air quality.
- Non-corrosive material prevents rust.
- **Easy Access**
- Makes cleaning and servicing easier which in turn leads to higher efficiency and longer life.
- **Painted Finish**
- Provides increased protection from rust and corrosion. Matches furnace in color.
- **External Service Port**
- Quicker and easier serviceability.
- **Flexible Application**
- Models for R-22 and R-410A refrigerants available

[CLICK FOR DETAILS ON TRANE COMFORT COILS](#)

VIDEO- How Trane Air Conditioners Are Made



Clicking the link above will start a download to your computer with a film on how Trane residential air conditioning units are manufactured. The content is virus free and safe to download. The file is in .3GP format and is 5:16 minutes in length with a file size of 7.29MB.

If you live in Kitchener, Cambridge, Waterloo Region or Woodstock Ontario and you need a Trane Air Conditioner, Trane Furnace or Trane Central Air System call [519-748-1160](tel:519-748-1160) Today!