### Your Ideal Comfort Solution®



## Ideal Comfort Solution®

The Old Way

Air conditioning & heating was focused on

- ★ Hot air for your house
- Cold air for your house
- Changing out boxes



## Ideal Comfort Solution®

Today, we

- ✓ Customize the Ideal Comfort Solution® for your home & family
- ✓ Create a healthy home environment
- ✓ Provide for your family's safety
- ✓ Provide Greatest Peace of Mind®







### Company Resume

#### Protection

- We specialize in amazing comfort
- We protect your home during & after installation
- We wear shoe covers in your home
- Work site cleaned to customer satisfaction
- We are fully licensed and insured
- 10-year Peace of Mind warranty





### Company Resume

#### Peace of Mind

- Clean-cut professionals on call 24/7
- Drug tested and background checked
- We use only the most reliable equipment & components
- Your comfort is guaranteed in writing
- You will be 100% satisfied



For your peace of mind and protection

Licensed & Insured

Me don't want you to







### Value of Our Installation

The North Carolina Alternative Energy Corporation, a nonprofit organization, examined air conditioning manufacturers' efficiencies versus the efficiencies that resulted after installation; they found the following:

90% of the units tested exhibited some sort of energy-wasting, comfort-robbing problem!

You Will Be in the Top 10%



### Quality Control Audit



Task	Complete	Incomplete	Not Required
Outdoor unit properly installed and level			
Indoor unit properly installed and level			
Indoor coil properly installed and level			
Access ories properly installed			
Air cleaner(s) properly installed			
Drain line(s) installed and tested			
Gas piping properly installed and tested			
Refrigerant piping properly installed and tested			
All low-voltage wiring properly installed and tested			
All line-voltage wiring properly installed and tested			
All insulation complete and secured			
All duct work complete and sealed			
All penetrations sealed			ALL
Furnace venting complete, secured, and checked		CEN	FILE
Combustion air intake installed and working		RECE	
All pilots lit (hot water heater, other appliances)		5400 2410	
Electrical panel secure, breakers in proper position	CIP	KE WEOK, O.	EALL
Condensate pump installed and operating properly	ic ASS	c COM, bon	
Humidifier operation and drain checked	THIS. TH	IL SKED	
Electronic air cleaner operationally tested		K)	
Supply air register installed, adjusted, and level			
Return air grille installed and level			
Thermostat operationally checked and level			
Blower set for proper air flow			
Measure cooling supply and return temperatures			
Measure heating supply and return temperatures			

# Problems are Not Solved by Equipment Alone

#### Even Air Flow Package

- Install balancing dampers
- Set/check cooling & heating air volumes
- Install double deflection diffusers (optional)
- Install new return air grilles (optional)

#### Air-Quality Package

- Caulk with lifetime duct sealant
- Post filter change schedule
- High efficiency air purification (optional)
- Easy-change filter grilles (optional)

#### Reliability Package

- Install new condensate drain as required
- Refrigerant removal per federal laws
- Provide customer training
- 33-point quality control audit

#### **Energy Savings**

- Complete system leak check startup and test
- Charge to manufacturer's specs
- Insulate suction lines
- Easy-to-read filter change schedule



\*Texas A&M University, Louisiana State University & Gulf States Utility, Lakeland Electric & Water, Pacific Gas & Electric, American Council for an Energy Efficient Economy, etc. These studies address at least one problem a poor installation plays on comfort or energy cost. Occurrences have been averaged.

Problems are Not Solved by Equipment Alone

#### **Comfort Control**

- Install ease-of-use comfort interface
- Install easy-to-read thermostat
- Set/check cooling and heating air volumes
- Install double deflection diffusers (optional)

#### Safety-First Package

- Double insulated copper wire
- Sunlight resistant wire ties
- New low-voltage wiring as needed
- Label all HVAC circuit breakers

#### Green Package

- Recycle all eligible materials
- Properly dispose of all hazardous materials
- Recycle existing refrigerant whenever possible
- Precision system control

#### Quiet Package

- Install vibration eliminators
- Install flexible duct connectors as required
- Cross-brake sheet metal
- Install turning vanes as needed

TRANE

<sup>\*</sup>Texas A&M University, Louisiana State University & Gulf States Utility, Lakeland Electric & Water, Pacific Gas & Electric, American Council for an Energy Efficient Economy, etc. These studies address at least one problem a poor installation plays on comfort or energy cost.

Occurrences have been averaged.

### Value of Our Custom Design

A proper heat-load calculation is the key to customizing your Ideal Comfort Solution™

#### Our Custom Design

#### Energy Star\*

- A good contractor will not size your equipment solely on square footage
- Assume your existing equipment was sized properly

#### Department of Energy\*\*

 It is the contractor's job to perform the correct sizing calculation for the home

#### Sizing Problems

#### Oversized

- Higher installation costs
- More breakdowns
- Large temperature swings
- Improper humidity control

#### Undersized

- Constantly running
- Higher energy costs
- Shorter life
- Reduced comfort



Energy Star, Sizing and Installation. http://www.energystar.gov/index.cfm?c=heat\_cool.pr\_properly\_sized \*\* U.S. Department of Energy, Sizing Residential Heating and Air Conditioning Systems. http://www.eere.energy.gov/consumer/your\_home/space\_heating\_cooling/index.cfm/mytopic=12300

# The Technology Story Explained

### **Modern Technology Explained**

### Heating and Air Conditioning has changed!

- New technologies
- New Refrigerants
- New Building codes
- New Concepts

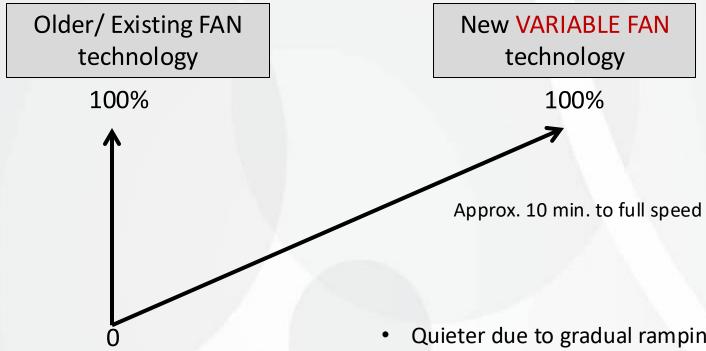








### Fan Technology Explained



- Increased noise as fan blasts to full speed
- Poor circulation due to short run time
- Lack of dehumidification due to short run time.

- Quieter due to gradual ramping of fan speed
- Increased circulation and comfort due to slower fan speed
- Increased dehumidification due to slower movement of air across indoor coil

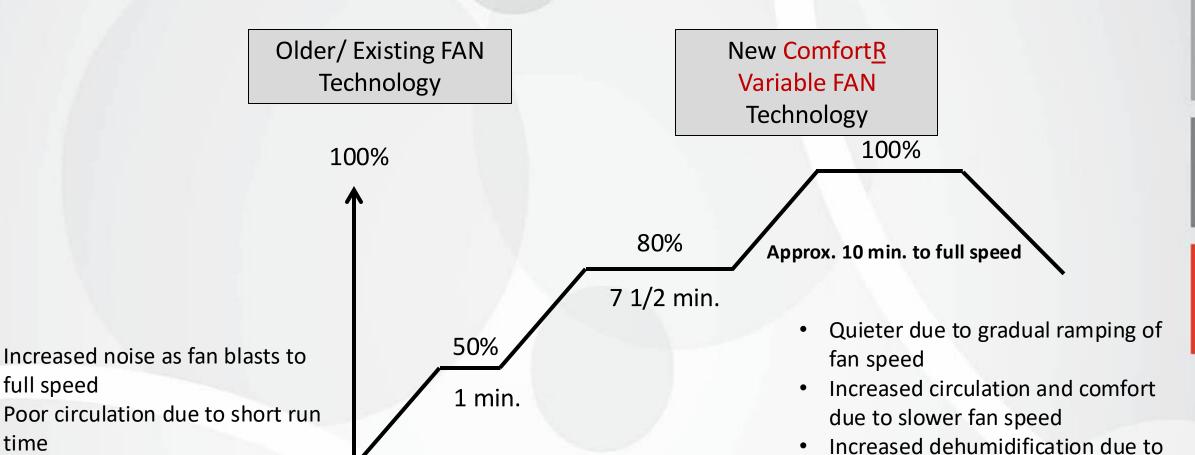
### Fan Technology Explained

full speed

short run time.

Lack of dehumidification due to

time



slower movement of air across

indoor coil

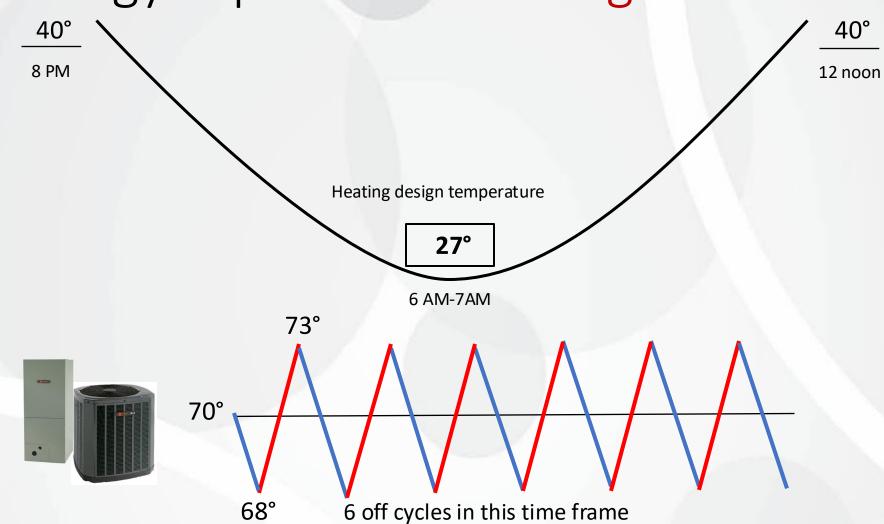
### Technology Explained - Heating

Single stage

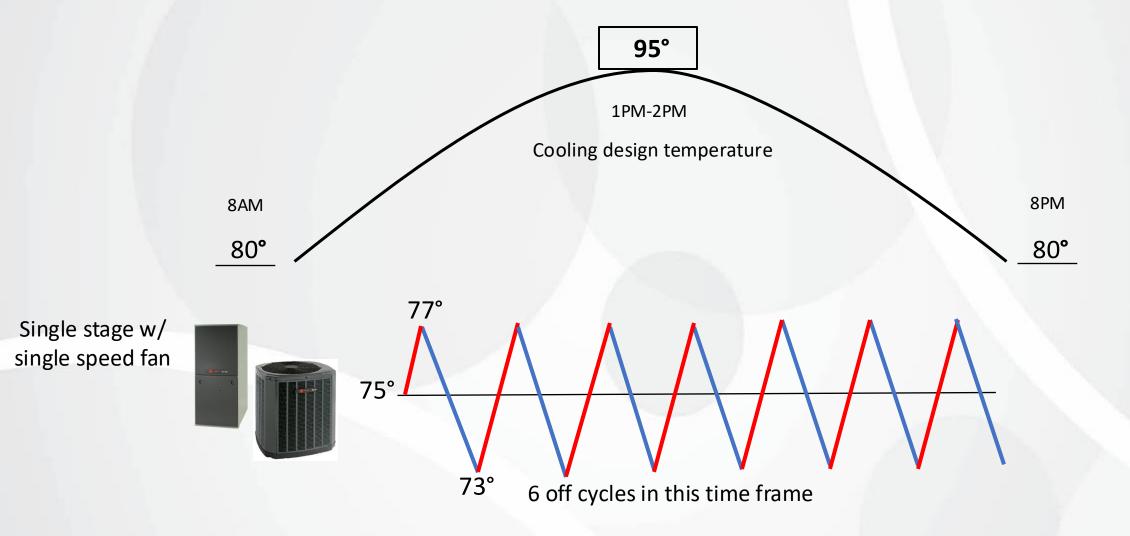
furnace or heat

pump w/ single

speed fan



### Technology Explained - Cooling

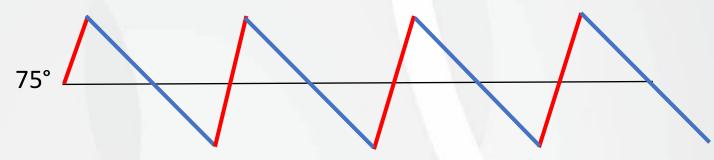


### Options Available

#### **CHOICE**

Single stage A/C or HP w/ComfortR fan (inside)





#### **PRIORITY**

MULTI-SPEED

A/C or HP

w/VARIABLE FAN (inside)



3 off cycles in the same time frame

Less than 1° swing in temperature ALL DAY

Off cycle **ELIMINATED!** 

#### **PREMIER**

**VARIABLE SPEED** 

A/C or HP

w/ VARIABLE FAN (inside)



Less than ½° swing in temperature ALL DAY

Off cycle **ELIMINATED!** 



### Our Exclusive Warranty

We will warranty the following items for a full 10 years against defects in materials or workmanship from the date your Ideal Comfort Solution system is placed into operation.

- All ductwork we install
- All ductwork insulation we install
- All sheet-metal straps, clamps, fasteners, hangers, locks, and drivers we install
- All drain piping, hangers and fittings we install
- All high-voltage electrical wiring, conduit, fitting, straps, clamps, and terminal connectors we install
- All high-voltage electrical disconnects, boxes, switches, and fuse blocks we install
- All low-voltage electrical wiring, wire nuts, straps, ties, and connectors we install
- All refrigerant piping we install is guaranteed to be refrigerant leak free. Warranty
  doesn't include the cost to gain access to underground or other inaccessible piping
- All refrigerant piping insulation we install
- All equipment pads, stands, jacks, and vibration elimination devices we install

Proper maintenance is what allows us to offer this unique warranty. The only requirement to keep this protection in force for a full 10 years is to renew your annual maintenance program when due.



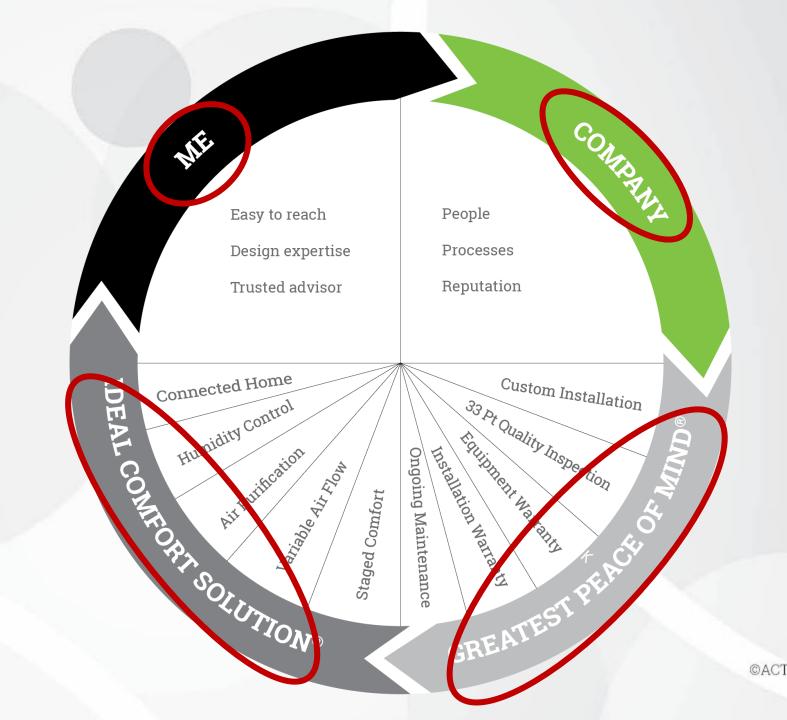


### Peak Performance Maintenance

- Outdoor coil will be inspected for heat transfer loss
- Fan blades and wheels will be inspected
- Refrigerant checked for proper charge
- Exposed ductwork will be checked for leaks
- Thermostats will be checked and calibrated as required
- Motors and bearings will be lubricated as required
- Controls and safeties will be tested as needed
- Condensate drains will be checked
- Crankcase heater checked for proper operation
- Relays, contactors and capacitors will be inspected
- Unit wiring and electrical disconnect will be inspected
- Humidifier operation will be checked, where applicable
- Temperature splits will be tested and recorded
- Indoor coil will be inspected
- Indoor air filters will be replaced [ ] time(s) per year
- Outdoor coils will be power washed [ ] time(s) per year
- Furnish inspection report & advise of any abnormal conditions



# Wheel of Value®





### Options Available

#### CHOICE

Single stage A/C or HP w/ComfortR fan (inside)



75°

#### **PRIORITY**

MULTI-SPEED

A/C or HP

w/VARIABLE FAN (inside)



75°

#### **PREMIER**

**VARIABLE SPEED** 

A/C or HP

w/ VARIABLE FAN (inside)



75°