Ideal Comfort Solution®

Your

The Old Way

- Air conditioning & heating was focused on
- 🗵 Hot air for your house
- 🗵 Cold air for your house
- **K** Changing out boxes

The New Way

- Today, we
- Customize the Ideal Comfort Solution® for your home & family
- Create a healthy home environment
- Provide for your family's safety
- Reduce energy bills
- ✓ Provide the Greatest Peace of Mind[®]



Our Company Resume

People

- With high moral and ethical values
- Ongoing training to assure your complete satisfaction
- All employees fully insured
- Customer service department to serve your individual needs

Protection

- We specialize in amazing comfort
- We protect your home during & after installation
- We wear shoe covers in your home
- Work site will be cleaned to your satisfaction
- For your protection we are fully licensed
- 10-year Peace of Mind warranty

Peace of Mind

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



The Greatest Peace of Mind®

Licensed, Insured and Protected



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!

Other significant HVAC industry surveys reveal*

Duct Leakage (93%)

- Poor indoor air quality
- Health and safety concerns
- Drafts and uneven temperature
- May DOUBLE HVAC portion of the energy bill

Oversizing (47%)

- Doesn't run enough to wring out moisture
- Air in sunlit & shaded rooms does not mix
- Could add 20% to operating costs
- Shorter equipment life

Incorrect Refrigerant Charge (75%)

- Increased failure rate
- Reduced moisture removal
- Equipment may be noisier
- Longer run time
- Could add over 20% to operating costs

Incorrect Air Flow (70%)

- Uneven temperatures
- Poor moisture control
- Noisy grilles and registers
- Could add more than 20% to operating costs





*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.



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			
	Accessories 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			
Zip:	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			
State:	All penetrations sealed			
Stc	Furnace venting complete, secured, and checked			
	Combustion air intake installed and working		I RECL	<i>"</i>
	All pilots lit (hot water heater, other appliances)		, you Tyl	<i>.</i>
	Electrical panel secure, breakers in proper position		RES VOU RECEIV RES VOU RECEIV NE CONFORT VO ASVED FOR ASVED FOR	
	Condensate pump installed and operating properly	. ASU	COMIL FOR	
	Humidifier operation and drain checked	THID' TH	HE SKEV	
ä .	Electronic air cleaner operationally tested		As.	
Date: City:	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			
	Operating temperatures recorded within limits			
	Operating pressures recorded and within limits			
	Variable air flow dip switches properly set			
	Emergency phone numbers provided			
	All areas cleaned to customer's satisfaction			
Name: Address:	All homeowner manuals provided			
Name: Addres	Customer instructed in system operation			



Quality Control Checklist

- Outdoor unit level
- Foundation bolts properly installed
- All line voltage wiring properly installed and tested
- All low voltage wiring properly installed and tested
- All electrical panels secure
- System circuit breaker(s) labeled
- Refrigerant piping rated 601 PSIG or higher
- All refrigerant piping properly installed and tested
- All refrigerant piping properly insulated
- System triple evacuated to 500 microns
- M-ohm test compressor per manufacturer's requirements
- Service port valves tightened to 14-18 ft-lbs
- Operating pressures and temperatures within limits
- Indoor unit(s) properly installed
- Indoor units separately tested
- Controller (thermostat) properly installed
- Controller set for desired airflow
- Assure controller is communicating correctly
- Condensate drain(s) properly installed
- All penetrations properly sealed
- All work areas cleaned to customer's satisfaction
- Provide owner operations manual(s)
- Review system operation with customer
- Provide emergency contact information



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)

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

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

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



Value of Our Custom Design

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

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*

 A good contractor will not size your equipment solely on square footage

Our Custom Design

 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
- * 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

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.



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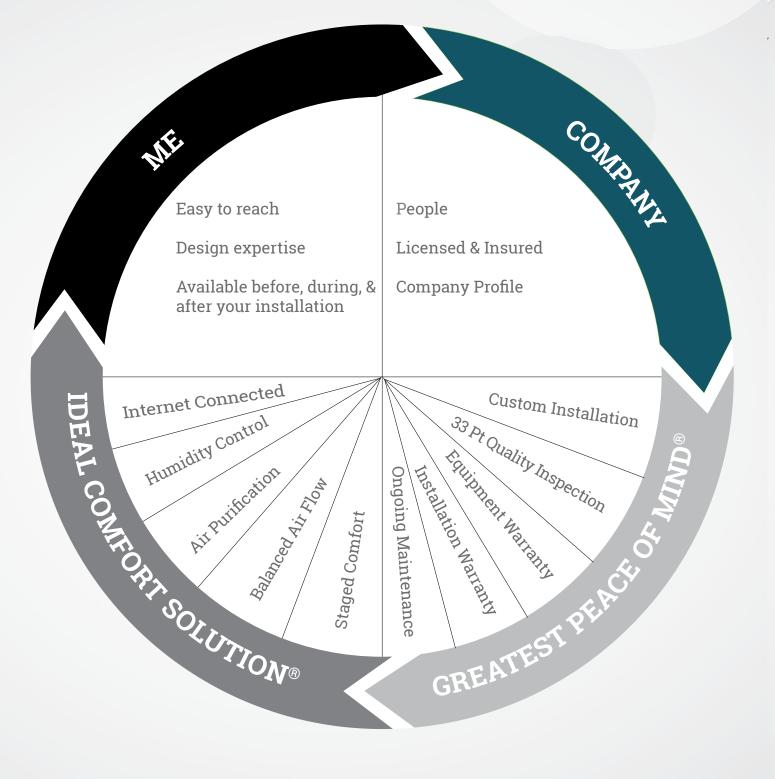
Peak Performance Maintenance

To Keep Operating at Peak Performance:

- Outdoor coil will be inspected for heat transfer loss
- Outdoor unit fan blades will be inspected
- Refrigerant checked for proper charge
- All penetrations will be checked for leaks
- Thermostats will be checked and calibrated as required
- Motors will be inspected
- 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
- Indoor blower wheels will be inspected
- Indoor coil will be inspected
- Indoor air filters will be cleaned [] time(s) per year
- Outdoor coils will be power washed [] time(s) per year
- Post emergency contact information
- Furnish inspection report & advise of any abnormal conditions



Wheel of Value®





Costs and Savings are estimates only, and can vary widely

Estimated Out-of-Pocket™

Air Conditioning Efficiency Savings

SEER	13	14	15	16	17	18	20	22	25	30	35
6	54%	57%	60%	63 %	65 %	67 %	70%	73 %	76 %	80%	83%
8	38%	43 %	47%	50%	53 %	56%	60%	6 4%	68 %	73 %	77%
10	23%	29 %	33%	38%	41%	44%	50%	55%	60 %	67 %	71%
12	8%	14%	20%	25%	29 %	33%	40%	45%	52 %	60 %	66%
14		0%	7%	13%	18%	22%	30%	36 %	44%	53 %	60%
16				0%	6 %	11%	20%	27%	36%	47%	54%
18						0%	10%	18%	28 %	40%	49 %

Heating Efficiency Savings

AFUE	80%	90 %	92 %	95 %	98 %
60%	25%	33%	35%	37%	39 %
65 %	19 %	28 %	29 %	32%	34%
70 %	13%	22%	24%	26 %	29 %
75%	6 %	17%	18%	21%	23%
80%	0%	11%	13%	16 %	18%

Heating

Average Winter	
Energy Bill	\$
Heating %	Χ
Annual Heating Cost	\$
% Savings	
Annual Heating Savings	\$

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Co	ooling
Average Summer Electric Bill	\$
Cooling %	Χ
Annual Cooling Cost	\$
% Savings	
Annual Cooling Savings	\$

Total Investment

Total	
Investment	\$
Monthly	
Investment	Χ
Estimated Annual	
Energy Savings	\$
Estimated Monthly	,
•	\$
Estimated	
Out-of-Pocket	\$

