

## **Replacement Equipment**

If you have resided in many parts of this country, you may not have paid attention to your air conditioning system. You may not have even had an air conditioning system. As a resident of Florida however, your air conditioning system is important to escape the high temperatures and uncomfortable humidity. When you begin to consider replacing your existing system, Air West can help. Perhaps you are concerned with high cooling costs. You may not know even know if you need to replace or repair it. Your current system may not satisfy your needs. Our Comfort Care Specialist can help answer all your questions.

Our Comfort Care specialist will discuss with you the design, operating principles, sizing, installation, maintenance, SEER ratings, indoor air quality and overall costs. As an intelligent consumer, you don't want to purchase a new system without considering all the factors that affect your system and ultimately your comfort and your pocketbook.

### **How does your system work?**

The outdoor (condensing unit) has a coil that heats up and releases the heat outside your home, into the air. This is known as sub-cooling. The indoor unit (air handler) has a coil that gets cold. This evaporator coil cools the air inside your home. The compressor (inside the condensing unit) moves the refrigerant between the two coils. When the refrigerant enters the evaporator coil it becomes a gas and it pulls the heat out of the indoor air and cools your home. The heat is then pumped back into the condensing unit where it becomes a liquid again and releases the heat into the air outside.

### **Heat Pump vs. Straight Cool**

Both systems cool your home in the same way but a heat pump reverses the process in the colder months to create heat. Like a toaster a Straight Cool system gets its heat from electric heat strips. A heat pump system extracts heat from the outside air and moves it inside. Heating your home with a straight cool system will be at least 4 times more expensive than heating with a heat pump.

### **What size system do I need?**

Our Comfort Care Specialist can help determine the proper size system. There are many considerations when determining size.

- How large is your home?
- How many windows, what size are they, what type, and which direction do they face?
- Is there an overhang on the house. How long is the overhang?
- How much insulation is in your walls and attic?
- How airtight is your home?
- How many people live in the home?
- What and how many appliances are there?
- How many computers?
- Is there any special lighting in the house?

Once all the facts are acquired, a Manual J (a load calculation done with engineering software) can be performed to determine the proper tonnage. If you have not made changes to your home and your existing system has been meeting your needs with reasonable electric bills, you most likely do not need to change the tonnage. When choosing tonnage it is important not to oversize or undersize the new system. If you undersize the system, you will have higher electrical costs because of longer run cycles and inability to reach the temperature you desire. An over sized system may not run long enough to pull enough humidity out of the air to create a comfortable environment in your home. A properly sized system has appropriate run cycles for proper humidity control, achieves the temperature you desire and saves money on cooling costs!

### **What is SEER?**

SEER stands for Seasonal Energy Efficiency Ratio. This ratio refers to how many BTU's (British Thermal Units) removed for each watt of power your air conditioner draws. The higher the SEER the more money savings you receive on the cooling portion of your utility bill. Each SEER point higher saves approximately 10% on your cooling costs. A recent bill was passed that the new standard for SEER will be 13 by the year 2006 for most systems. Let's say your present system has a SEER rating of 6 and you are considering purchasing a 13 SEER system. You would save 53.8% on your monthly cooling costs. Our Comfort Care Specialist can show you the savings on different SEER and show you how a higher SEER rated system will pay for itself in savings.