NATIONS
RESIDENTIAL SERVICE

Electric Air Conditioning/Heating System

There is an evaporative coil inside your furnace through which air blows. This coil has lots of thin fins. Attached to these fins is a small continuous tube which contains refrigerant (Freon). This refrigerant begins to boil inside the tube as the warm or hot air from your house passes over the coil. Prior to boiling, the refrigerant is very cold. As the heat from the air is transferred to the refrigerant, the air temperature will drop quickly. When you turn your air conditioner on, the main blower in your furnace begins to circulate the air through your house. The moist, humid air passes over the cold fins of the coil. The water in the air condenses on the fins just like on a cold glass of iced tea on your patio table. Everything works fine if enough warm moist air can pass over the fins fast enough. If not, the temperature of the fins can drop below 32 degrees F. Ice starts to form on the fins and soon your coil is a solid block of ice. If the evaporative coil is working properly and is clean, the next step is that the refrigerant flows through a pipe to the outside condensing unit. Again the refrigerants flows through a coil and a fan blows across the condensing coil, closing the heat out of the refrigerant just like we blow on hot food to blow the heat off the food. The condensing coils have fins, too and if they are clean no problem! But, if they are blocked by furniture, debris, leaves or pet hair, air cannot reach the refrigerant and then the equipment does not cool properly.

Get the trimmer- get the broom and clean the area around the coil, removing any debris, furniture and trimming foliage back at least 2 feet (0.6 meters) allow for adequate air flow around the condenser.

Home Depot sells a “water power nozzle.” Use this to clean out the condenser unit and all the surrounding area.

#1 hint- if you are painting or remodeling- change your filters often!

To maximize the cooling and prevent your unit from failing, please consider the use of **higher efficiency air filters**. Many filters have arrows indicating the correct direction to make sure that the air will flow properly.

Make sure the filter fits tightly and securely. If it does not stay in place during operation, it will not be effective. Standard inexpensive spun glass filters are almost always less than 20 percent efficient.

You can purchase air filters that will not only protect your equipment but also do a remarkable job of cleaning your interior air. These filters can trap very small particles of dust, pollen, mold, and other irritants. Higher efficiency air filters can sometimes be coated with chemicals that can kill tiny microbes such as bacteria and mold.

GOOGLE the web for choices of new fangled filters that promise not only to protect the HVAC equipment but also to keep the air you are breathing cleaner, too.

When your HVAC unit fails and you end up waiting in a hot house, plus paying$50 co-pay for service, you will realize that you could have bought many filters that would have lasted through a lot of cooling months! Plus, those filters would have saved you aggravation and cash.