

## UNDERSTANDING YOUR NEW HEATING, VENTILATING, AND COOLING SYSTEM-

The Federal Government, California, and local agencies have established design guidelines for the heating, ventilation, and air conditioning (HVAC) system in your new home. These guidelines address system capacity, expected energy use, performance, and comfort. Your system is engineered to comply with these guidelines, and: ▶ Provide air circulation, temperature, and humidity control; ▶ Maintain indoor temperature rather than recover quickly from temperature extremes; ▶ Operate for extended periods of time during peak conditions.

### HEATING AND COOLING OPERATIONS

Your system is designed to maintain indoor temperatures, not attain them. Your system's target cooling temperature on an average peak summer day in your area is 78°, while the target warming temperature on an average peak winter day is 70°. This means that you shouldn't expect your system to cool your house below 78° on the hottest days of the year, or to warm your house above 70° on the coldest days of the year. These target temperatures assume that your home has window coverings and that your thermostat is on, or programmed to turn on when system operation is called for. One of the largest loads of your home is created by the windows. Although your system is designed to accommodate this load, by using window coverings on high exposure windows you will enjoy shorter equipment operation, lower energy use, greater overall comfort, and potentially be able to maintain indoor room temperatures below 78° in the summer.

### RECOVERY PERIODS

If your system has been off during peak conditions it will need time to recover. After it is turned back on again, it will cool or heat your home approximately ½° to 1½° per hour. This is why it's not recommended that you use your system to attain desired heating or cooling temperatures in short periods of time. For example, if your system is off on a warm summer day and you turn it on at 5:00 p.m., it could take 4 to 7 hours to cool the house to 78°. To shorten the recovery period, program your thermostat to use a setback temperature that is within two to four degrees of your desired temperature. Your system is designed to accommodate reasonable recovery, but the main factors used to select your equipment were efficiency and the ability to effectively maintain year-round comfort.

### VENTILATION

Your system's fans are designed to comply with standard ventilation requirements. Because your new home is

constructed with very few drafts (when windows and doors are closed) there is limited air transfer from outside to inside. For this reason, it's important to follow normal ventilation practices to minimize the potential for moisture build-up and/or mold growth. You may need to increase ventilation by opening windows, even in the winter time. This need would occur, for instance, in a bathroom that has a window but no mechanical ventilation.

### ROOM TO ROOM TEMPERATURE

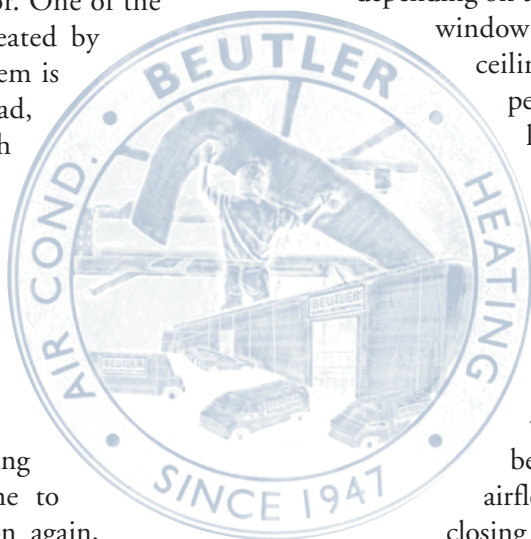
Each room in your home can vary in temperature depending on thermostat location, home orientation, window area, type of window coverings, ceiling height, construction material, perimeter wall exposure, and exterior landscaping. Generally three to six degrees of temperature difference can be expected between interior rooms. Such variations are common, particularly in two story homes. You can operate your system fan during peak conditions to reduce heat variations from floor to ceiling, and to minimize temperature differences between rooms. You can also adjust airflow to individual rooms by opening or closing supply air registers, thereby forcing air into rooms that need more conditioning.

### AIR FILTRATION

The standard air filter installed in your unit is designed to prevent large dirt particles from building up and restricting airflow in your furnace, air conditioner coil, and duct work. It is not an air cleaner and does not have the capacity to improve indoor environmental health or air quality in your home. You should change your air filter every 30 to 60 days.

### FOR MORE INFORMATION

If you need more information or have questions, contact your sales agent. You may also contact the Comfort Zone at (916) 364-9370. Visit our website at [www.beutler.com](http://www.beutler.com).



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