

## Words to the Wise Green Condo Communities

By their very nature, many condominium communities adhere to some of the most basic principals in green housing. First is building density, to minimize the physical and operational footprints of buildings and maximize surrounding open space. Next is proximity to mass transit, shopping and schools, given their typical location in urban areas; and finally, reduced resource use per unit, resulting from shared systems, walls and common spaces.



Overall, consumers are increasingly aware of environmental issues. Last year was a turning point for the green house hunter as forward-thinking developers and builders introduced many new, luxurious, multi-family communities across the country touting eco-friendly features, inside and out.



According to research, buyers are willing to pay more for a green home. They appreciate the long-term durability, a healthier living environment and energy savings. Homes designed with environmental concerns in mind can reduce water consumption by 40 percent and energy use by 30 percent or more. Reduced energy consumption means lower assessments for the condominium owners.

Some of the popular design features typically found in new, eco-friendly condo construction include:

**Heating and Cooling:** A geothermal loop field is the primary heating and cooling "central plant" for the water source heat-pumps in the residential condominiums. The multi-ton capacity loop field, composed of piping drilled hundreds of feet deep into bedrock, can cover 100% of the demand load approximately 80% of the time throughout both heating and cooling seasons. A conventional boiler and cooling tower supplement the geothermal system at peak heating and cooling periods.



**Energy Source:** Buildings utilize the Sun's energy to produce hot water. A solar thermal hot water system consisting of compound parabolic solar collectors mounted on the roof of the building. These systems produce several million BTU's per year and can handle a significant portion of the building's domestic hot water.

**Stormwater Management:** Capturing and redirecting stormwater results in less stormwater run-off (i.e., discharge into the city sewer system) than a conventional system would. One example is a permeable paver system installed at ground level which allows rainwater to soak into a stone-filled infiltration basin below, where it is filtered through the stone and then allowed to soak into the surrounding soil; only excess stormwater is released into the sewer system.

**Windows:** All windows and patio doors feature double pane insulating low-E glass.

**Insulation:** The building's "envelope" (exterior walls, windows and roof) are designed with features which enhance energy performance. Unlike all-glass buildings, architectural style minimizes wasteful heat loss and heat gain, without sacrificing views and daylight. The building's roof and exterior walls are well-insulated with additional interior insulation and drywall at the interior to achieve a high R-value. In many cases, recycled drywall is also used to build the interior walls.

Many interior features are also eco-friendly. For instance, nontoxic paints that do not contain toxic Volatile Organic Components, or VOCs, are used for walls; reclaimed wood is used for flooring, and countertops made of recycled materials are often featured in kitchens and bathrooms. Green toilets conserve water in different ways: low-flow toilets use about 20 percent less water per flush while dual-flush toilets with two buttons offer the option of flushing with a half or full tank. And, of course, energy-efficient appliances are part of the interior package.



If you would like to learn more about green building and renovation, visit the U.S. Green Building Council at [www.usgbc.org](http://www.usgbc.org) or the National Association of Home Builders website at [www.nahb.org](http://www.nahb.org). And when your buyers or sellers need a home inspector who understands eco-friendly construction, you know who to call.