



WHAT IT MEANS TO BE GREEN AT ALBANY GROVE

Land Preparations at Albany Grove

- Albany Grove began with the reuse of an existing residential parcel containing a vacant single family home and 3 out buildings. Removal of existing forest was minimized by reusing the site. Ruppert O'Brien, the developers of Albany Grove, purchased 5 acres of forested area in Montgomery County in the name of the community that will be set aside as protected forest conservation area.
- Albany Grove is defined by the National Association of Home Builders Green Building Program as an 'infill' project. Meaning the site was located near public transit and adjacent older developed parcels thereby reducing the environmental impact of new development.
- Albany Grove contains an extensive onsite rain water filtration system. This underground system will filter the rain water run-off from the entire community prior to releasing it back into the environment.
- Existing onsite wetlands that are contributory to the Chesapeake Bay were improved with a redesigned stream bed on the southern edge of the property. The redesigned stream bed will dramatically reduce erosion and prevent silt from flowing down stream and adversely affecting the environment.
- Thoughtful placement of the townhome buildings with southern facing facades allows for improved solar heating during the winter months thereby reducing energy usage and utility costs. Placement of some townhome buildings against existing forested area and the placement of oversized street trees will increase the communities shading, moderate temperatures and minimize the homes' cooling costs in the summer months.
- Alignment of the onsite roadways was done so they follow the natural topography of the land minimizing the amount of soil being disturbed and reduced the loss of soil due to erosion.
- Creative placement of retaining walls in several locations throughout the community also reduced the risk of soil loss through erosion.
- The landscape plan includes vegetation native to the site allowing for a seamless blend of the existing and the new. Additionally plantings are grouped in clusters of plants with similar watering needs.

Resource Efficiency

- Each home at Albany Grove is built with Advance Framing Methods to ensure waste is minimized without losing structural integrity.
- Using prefinished products (siding, cabinets, windows, hardwood flooring ext.) reduces the environmental impact by eliminating the need to apply finishes onsite. All such products are finished in a control environment and shipped to the home for installation.
- Every Ruppert O'Brien home has a covered entry. A covered entryway, as recommended by NAHB, prevents water intrusion, protects the entry from inclement weather and increases the shading during the summer months.
- Homes at Albany Grove have a 36" overhang at the roof line on the front, rear and side of the homes. The recommended overhang for our climate region index is a minimum of 18"; most new townhomes in the area do not have any overhang. This extensive overhang protects the building envelope and homes durability. Overhangs shade windows and minimize summer heat gains.
- All homes have perimeter drains at the foundation, sump pumps (per plan), dry wells (per plan) and drip ledges at the roof line; all of which divert surface and sub-surface water from the home, therefore protecting the home against water intrusion and decay.

HVAC Efficiency

- The HVAC contractor at Albany Grove uses Manual-D duct work in each home to increase the efficiency of the system. This means the ducts are sized properly to each room and the ducts have fewer 90 degree bends to ease air flow and lower energy costs.
- The HVAC system is put through a thorough 'start check' by a certified HVAC technician to ensure the system is running efficiently according to the manufacturers recommendations.
- Ruppert O'Brien uses only 93% high efficiency HVAC systems with 13 sear air conditioners in all the homes we build. These systems use less energy to accomplish the same task and reduce fuel costs.
- Windows used in our homes are all double paned, insulated windows to retain as much of the indoor temperature as possible while providing as much natural light as possible. All windows come with a life time warranty on the glass and seal.
- The number and location of the windows in our homes is well thought out to provide maximum cross ventilation. No other townhomes in the area have as many windows nor with the overall size of our windows.

Water Efficiency

- We have strategically located the hot water heaters on the entry level in the middle of the home so the water source is in close proximity to the kitchen and most bathrooms. The location of the hot water heater will provide for shorter 'pipe run' for hot water to travel thereby using less energy. The room in which the hot water heater sits is climate controlled so the water heater uses less energy to heat the water in the winter months.
- We've installed water saving shower heads, sink faucets and toilets to conserve our most important natural resource.
- No plumbing lines are installed on exterior walls, preventing any frozen pipes, heat loss and condensation.

Indoor Environment Quality

- The entrance from the garage to the home and the wall between the garage and home are designed to be as air tight as possible to reduce the possibility of air flow between the two areas of the home. Each home is also equipped with a carbon monoxide detector.
- Lumber used in the construction of our homes (OSB, MDF and plywood) meet or exceed all low formaldehyde emission standards.
- Each home built at Albany Grove has an inactive radon mitigation control system in place to ventilate the soil under the home and to prevent any leakage of gases into the home.
- All Ruppert O'Brien homes are wrapped with an exterior vapor barrier prior to the installation of the exterior façade protecting the home from unwanted moisture or wind penetration thereby lowering energy costs and maintenance expenses. A vapor barrier is also installed under the concrete slab of the home preventing any unwanted moisture from seeping up into the home from below.
- HVAC duct work in unfinished spaces, such as the attic, are insulated to prevent heat loss and condensation thereby increasing the efficiency of the HVAC system and lowering energy costs.
- Prior to the installation of flooring, the sub-floor is checked to ensure the moisture content is below 19%. Installing flooring on dry sub-floor prevents hardwoods from shrinking and also helps keep indoor mold to a minimum.
- Carpeting, carpet pad and adhesives used in our homes meet or exceed all NAHB requirements for indoor air quality.

Homeowners Information

- Each homeowner will be provided with a Ruppert O'Brien Homeowner Manual to be used as a reference guide in maintaining the home. Inadequate maintenance can defeat the builder's best efforts to create a resource efficient home. The manual will explain the proper operation and maintenance procedures to care for the home.
- Finally, we encourage you to recycle and have made it convenient by designing a recycling cubby in the garage. This small area at the front of the garage provides a great area to store your recycling prior to placing it curbside for pick-up.