Our Lady of Grace Apartments is a new construction project composed of 60 affordable apartments in 12 townhome-style buildings and a community building, which is located in Newark, Delaware. The owner enrolled the property in the Energize Delaware Affordable Multifamily Housing Program, which enabled New Ecology, Inc. to provide design support and testing and verification through construction to achieve ENERGY STAR certification and enhance the property’s energy performance and durability while reducing the utility costs for the owner and residents.

Process

Working alongside the project architect and engineer, New Ecology provided peer-review of the plans and specifications and energy modeling analysis to assess different envelope, mechanical, and ventilation options. The collaborative process helped the team assess their options and select a cost-effective package that exceeds the energy code requirements and includes novel additions, such as pre-wiring and plumbing for the subsequent addition of dehumidification equipment should the need arise in small apartments. While such equipment is not a requirement, dehumidification can be a challenge in this climate and with HVAC equipment that is often designed for larger living spaces. Balancing design options and costs through multiple plan reviews and iterative modeling, which provided the utility allowance analysis, helped the project finalize its construction and financing plans.

Through construction New Ecology will provide ENERGY STAR Rater services. Upon project completion, scheduled for 2020, New Ecology will provide the owner and management company with an Operations and Maintenance Manual as well as a training to help staff effectively operate and maintain the equipment, a necessary component to ongoing building performance. New Ecology will also create a Resident Green Guide to help residents navigate the green features of their home and to partner effectively with management.