Energy Features:
- Siteing the buildings, adjusting the window locations, and extending the overhangs to maximize passive and active solar opportunities; reducing the heating and cooling needs, and allowing for solar thermal and solar PV systems on the building.
- Insulation levels of R-60 for the ceiling, R-40 for the walls, and R-10 for foundation walls and under-slab.
- R-7 (U-factor 0.14) windows and adjustments to window locations and sizes for optimal energy performance.
- Minimizing or eliminating thermal bridging and to achieve superior air sealing.
- Whole-house ventilation system with heat recovery.
- High-efficiency air-to-air heat pump for heating and cooling.
- Water-efficient fixtures that will reduce water use and hot water demand.
- Solar thermal for the domestic hot water system coupled with a Navien gas on-demand boiler.
- Energy management systems and smart meters to enable residents to manage their energy consumption.

Healthy Housing Features:
- Low-toxicity building materials and finishes.
- Whole-house ventilation system.
- Hard surface flooring materials.
- Source-point ventilation in baths and kitchens for moisture control.
- Integrated Pest Management construction practices.

Environment Features:
- Low-toxicity building materials and finishes.
- Construction waste management—75% diversion rate.
- Site restoration.
- On-site stormwater management.
- Drought-tolerant and climate-appropriate landscaping.

Connectivity Features:
- Infill development using existing infrastructure.
- Bicycle storage.

Adapted from award-winning plans of the Erie-Ellington Development of a decade ago, the proposed building design for Nuestra Comunidad’s E-squared development concept reflect best practices in healthy housing, energy and water conservation, connectivity, site development and materials selection as well as renewable energy. Now, with green building practices more widely established and understood, the designs have been taken to the next level, and we are targeting achievement of LEED for Homes Platinum certification and approaching Net Energy Positive. Our goal has been to offer a design that is appropriate for the local context, achieving advanced energy performance using established methods and technologies, and providing a comfortable, healthy, easy to maintain home for the residents.