

# St. Rose of Lima Hall

(formerly known as Ravine Apartment E)

**LEED BD+C: New Construction v3; LEED Certified in 2016**



## **Overview:**

Built in response to demand for on-campus housing, St. Rose of Lima Hall became Aquinas College's newest residential facility in 2014.

Each floor of the three story structure has 4-bedroom apartments and 2-bedroom apartments. St. Rose of Lima Hall boasts a viewout basement to allow daylighting and views of the campus athletic field. The 29,178

gross square foot building meets needs of residents through two community lounges and a laundry room. The building has truly become the housing choice for the college's upperclassman.

## **Energy Conservation:**

The most notable energy conserving features of St. Rose of Lima Hall are the fiberglass windows

(U-value rating of 0.29) and extensive insulation in the attic (R-50). All the HVAC ductwork is below the R-50 attic insulation and the 1-hour fire rated ceiling. It was discovered that the building was so air tight, an exterior air makeup unit was added into the HVAC system to ensure air quality.

The heating/cooling is provided by high efficiency, sealed combustion natural gas condensing furnaces coupled with air cooled condensing units having a SEER rating of 13 or above. Controls for each furnace are a low voltage programmable single stage heating/cooling thermostat. The return air of each furnace is also filtered.

The apartments contain operable windows in the living and bedroom areas to meet ventilation requirements and to give occupants the option of fresh air.

#### **Focus on Lighting:**

LED exterior lighting is installed in multiple locations including the parking lot, sidewalks, stairwells, and entrances, and is controlled via the building management system.

Inside the building, occupancy sensors detect when residents are in the halls or other common areas which keeps the lights switched off unless necessary to save energy. Occupant controls are also in place to manually turn off the lights in offices and meeting/multipurpose

rooms. The interior lighting fixtures for this project utilize linear fluorescent, compact fluorescent and self-ballasted compact fluorescent lamps.

#### **Waste Minimization:**

Aligned with Aquinas College's Zero Waste effort, waste stations consisting of recycling, composting, and trash are located in common areas of the building with appropriate signage.

To encourage personal responsibility for waste and get us closer to our zero waste goal, students must dispose of their personal trash in the dumpster located outside the apartment. Recycling and composting was intentionally conveniently located in common areas as an incentive.

A special recycling tower containing six bins (for Styrofoam, e-waste, batteries, ink cartridges, Terracycle, and goodwill donations) is also located in the lobby.

In the laundry area, a small labeled bin is in place specifically for lint collection (compost) and a small trash can for other waste.

#### **Construction Waste Management:**

Also, aligned with Aquinas College's Zero Waste effort, construction of the building diverted 97% of the on-site generated construction waste from landfill. That was over 1,200 tons of waste diverted! The project team also developed and

implemented a construction waste management plan that identified the materials to be recycled or reused.

#### **Local Economies:**

A portion (over 10%) of the building materials were shipped from facilities within 500 miles of Aquinas College. By purchasing materials from regional manufacturers, we help support our economy and reduce the environmental impact of transporting materials to the job site.

#### **Reduce, Reuse, Renew:**

The construction materials were carefully selected for St. Rose of Lima Hall, with recycled content and reuse in mind. Over 10% of the materials used contain either post-consumer or post-industrial recycled content. Not only does the reuse of materials provide an economic benefit, but the practice also reduces harm to the environment by reclaiming materials that would have been sent to disposal facilities.

#### **Clearing the Air:**

Paints, varnishes, and cleaners contain Volatile Organic Compounds (VOCs), or compounds that contribute to ground-level ozone formation. According to the [EPA](#), some VOCs are also suspected to cause cancer in animals. A majority of adhesives, sealants, paints, carpet,

padding, and particleboard used in Ravine St. Rose of Lima Hall are low VOC.

Per Aquinas policy, smoking is prohibited on campus. Aquinas is doing its part to “clear the air” and assure healthy indoor air quality for all staff, students, and visitors.

#### **Water Matters**

Irrigation is present onsite, but a weather sensor system is connected to the controller, to ensure efficient water use. Water fixtures inside the building were carefully selected, including faucets with aerators and low flow toilets.