

ENERGY STAR Multifamily High Rise Building Profile

Thomas Place Orland Park

15415 South Harlem Avenue
Orland Park, Illinois 60462

**Building Developer:**

TPA Orland LP

Licensed Professional:

Ryan Companies US, Inc.

Year Certified:

2013

Construction Type:

New Construction

Sector:

Mixed Income

Technologies Used:

- HRV saves energy and provides ventilation
- Steel frame walls with open and closed cell spray foam and exterior rigid insulation

**Building Description:**

Thomas Place is a 4-story affordable senior housing building, with 80 apartments and amenity spaces. There are a mix of 1-bedroom and 2-bedroom apartments.

The metal framed walls have 1" of closed cell and 4.5" of open cell spray foam insulation between the studs and 1.5" of continuous rigid polyisocyanurate insulation on the exterior (R-10) to reduce thermal bridging. There is 16" (R-54) of blown fiberglass insulation in the roof framing, and some roof areas with additional 1-2" of rigid insulation. Double-pane, argon-filled, vinyl frame windows have a U-0.30 and SHGC-0.23. Air leakage in the apartments is 10% lower than the required threshold for the ENERGY STAR Multifamily High Rise Program.

Apartments have right-sized split system air conditioning for cooling (SEER 16) and 95% AFUE gas furnaces for heating. ASHRAE 62.2 ventilation is provided by ENERGY STAR certified heat recovery ventilators (HRVs). A 95% efficient central gas water heater and very low flow faucets (0.5 gpm) and showerheads (1.5 gpm) reduce both energy and water consumption. ENERGY STAR certified refrigerators, dishwashers, clothes washers, and light fixtures have also been installed.

Outside the apartments, occupancy sensors for lighting have been installed in all common spaces, including stairwells and corridors, further reducing electricity use.