

NUDURA Project Profile

LOCATION: Lexington, Kentucky, United States



NET ZERO

PROJECT TYPE

Educational Facility

STATUS

Complete

PROJECT TYPE

Holdfast Technologies, LLC

Third Net-Zero School in Kentucky.

LEED Gold Certification

Third largest Solar Thermal Array in the U.S.

PROJECT DESCRIPTION: Locust Trace Agriscience Campus

An \$18 million school that serves as the agricultural component of the Eastside Technical Center. It is a working farm with a vet clinic and a classroom building, not only for ag classes but for traditional math, English and science classes as well.

- A 70,000 sq. ft. high-performance building envelope with NUDURA Insulated Concrete Forms for interior and exterior walls. It is the **third Net-Zero School in Kentucky** and earned a **LEED Gold Certification**.
- **Renewable Energy Strategies:** 16 kbtu Sq. ft. vs. 78 kbtu Sq. ft. - 175 KW Solar PV. 7400 sq.ft. of solar thermal panels.'
- **Envelope Strategies:** NUDURA Insulated Concrete Forms, Roof with southern exposure for solar orientation, Glazing U-Value 0.26, East West Orientation to maximize Daylighting.
- **Mechanical Strategies:** geothermal HVAC solar thermal, n tube radiators, high volume/low velocity fans, demand controlled ventilation, energy recovery, natural ventilation.
- **Other Eco-Friendly Strategies:** Highly efficient lighting design 0.6 W/sq ft, natural daylight harvesting, occupancy sensors, rainwater catchment for site irrigation and animal watering, natural water well for backup.

