



## Turkey Foot Middle School - Edgewood, Kentucky

### FAST FACTS

- A 133,000 sq. ft. high-performance building envelope with NUDURA Insulated Concrete Forms for interior and exterior walls. It is the **second Net-Zero School in Kentucky** and earned a Merit Award in the 2011 AIA Kentucky Awards for Excellence in Architectural Design
- **Strategies to Reduce Energy Consumption:** Integrated design process, geothermal HVAC, daylighting, thermal envelope, kitchen, monitoring/verification, student/staff involvement
- **Thermal Envelope Strategies:** NUDURA Insulated Concrete Forms-no mezzanines, low infiltration (avoided pitched and vented roof systems), non-daylight glass percentage minimized, good roof insulation
- **Renewable Energy Strategies:** Solar Panels - \$2,600,000 cost or \$6.70/kW. Awarded \$2,000,000 grant from stimulus funds. Anticipate \$100,000 annually from SRECS.

#### *Solar Electric Generation:*

- Phase I – 385 kW total (275 kW thin film and 110 kW crystalline)
  - 450 MWh/yr electric production
  - Reduced grid energy usage from 21.7 kBtu/sf yr to 10.2 kBtu/sf yr
- Phase II – 315 kW anticipated.

# NET ZERO

## PROJECT STATISTICS

**Location:**

Edgewood Kentucky, United States

**Type:**

Educational

**Size:**

133,000 sq. ft

## CONSTRUCTION TEAM

**Architect:**

Birdstairs

**ICF System:**

NUDURA Inc.



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Kentucky.**

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