

# Home Improvement & Energy Conservation Lab

## Project Information

- Square Footage: 2,631 sf
- Completion Date: Fall 2009

## Design Engineering

- SEER 15+ variable speed air-conditioning systems
- 93 to 98% efficient condensing boiler
- Filtered whole house ventilation to utilize milder weather for low energy comfort cooling
- Photovoltaic solar panels to meet LEED onsite renewable energy requirements
- Day-lighting control using Solatube tubular skylights
- Occupancy sensors for intermittent lighting and exhaust fans
- High pressure sodium lighting for outdoor illumination
- Low and ultra-low flow plumbing fixtures
- High efficiency instantaneous gas-fired water heater
- Freewatt micro-combined heat & power (MCHP) cogeneration system

## System Integration

- Control panel design and fabrication
- Controller programming
- Furnished all instrumentation

## Neighborhood Housing Services of New Haven, CT

Neighborhood Housing Services of New Haven is a non-profit housing developer in New Haven providing housing rehabilitation assistance, new construction and affordable housing development for low and moderate-income households. The Home Improvement and Energy Conservation Laboratory is designed to meet the US Green Building Council's LEED certification program with its primary focus on teaching energy efficient technologies that the average homeowner can purchase and maintain. ICDS was contracted to design mechanical, electrical, and plumbing systems that meet the requirements of LEED 2.2 certification. The project is fully designed, but is under application of funding from the Kresge Foundation.



# ICDS

Innovative Construction & Design Solutions, LLC

419A Whitfield Street.  
Guilford, CT 06437  
P: (203) 453-8596  
F: (203) 453-7012  
E: info@icdsllc.com

