

**First Parish in Needham
Unitarian Universalist
Building Renovation Project – Environmental Features**

Architect: Frank Olney, AIA of Johnson Olney Associates, Boston, Mass
Engineers: Thompson Consulting Inc., Marion Mass

Site Features

- Renovated existing building (vs. all new), lowering need for new materials
- Reduced building demolition waste going to landfill through salvage (cabinets, etc.) and recycling (lumber, pipes)
- Retention of stormwater on-site, reduced flow off-site to storm sewer system
- Use of organic fertilizers in lawn areas
- Clean-up of lead-paint contamination in window trim and yard mulch
- No expanded parking, able to share Town's adjacent parking spaces.

Building Features

- Fully insulated building, including Sanctuary
- Low VOC materials specified throughout - paints, carpets, cabinets are formaldehyde-free
- Maple floors are from certified forests (they practice environmentally-friendly harvesting and re-planting procedures) as per the Forest Stewardship Council (FSC).
- Certain materials have high recycled content like Marmoleum sheet flooring in kitchen (made of recycled wood products and linseed oil)
- New High Efficiency windows with Low-e, argon-filled glass
- Ventilation system with heat recovery
- High efficiency AC system with "friendly" refrigerant (no CFCs or HCFCs)
- "Free-cooling" system for Parish Hall with CO2 sensors
- Energy Management System (EMS)
- EMS Web access for remote monitoring
- Separate zoning (temp control) for all spaces
- Automatic Lighting Controls via motion sensors
- Maximize use of Daylighting in Parish Hall
- High Efficiency Light Fixtures
- Programmable, Dimmable Compact Fluorescent lights
- Dual Flush Toilets
- Low-Flow Auto Flush Urinals
- Energy Star Appliances
- "Green" cleaning products and supplies
- Electrical Infrastructure ready to accommodate the installation of a 5KW solar PV system

NSTAR Rebates totaling \$13,550 for High Efficiency Design features. Rebates being used to pay for the insulation of the historic Sanctuary building.