

Deep Energy Retrofit Open House

Saturday, December 3, 2011 • 10 AM — 1 PM

3 Primrose Lane • Westford, MA

Steve and Jill Atkins will be sponsoring an Open House, in conjunction with National Grid, showcasing the Deep Energy Retrofit of their home in Westford, MA. Together with Basnett Design/Build/Remodel of Littleton, MA, they are expanding and updating their subdivision colonial built in 1993 to create a super energy efficient, highly durable home designed for their family's comfort and good health.

Steve and Jill purchased the house in 2003, drawn by its location in a neighborhood community, on a good lot, and in a town with a top-rated school system. After a few years in the house and the discovery of some deficiencies in the construction and floor plan, they decided to renovate to make the house work better for their needs. The original project plans included significant energy improvements, with rigid foam insulation under new siding and a new highly insulated, unvented roof. Basnett DBR introduced the Atkins to the DER incentive program, which led to additional energy efficiency measures in order to qualify. The project also includes some added space, a new re-pitched roof, and renovations throughout the house.

The project is aiming for completion by December 2011.

Here are some of the highlights of this Jamaica Plain 3-family DER retrofit project:

- **Roof:** R-65, with 9 ¼" closed-cell spray foam and 1" interior Polyisocyanurate foam for a thermal break
- **Walls:** up to R-41, with 5 ½" of open cell spray foam and 3" rigid Polyisocyanurate foam on exterior
- **Unfinished Basement Walls:** R-21 below grade; R-42 above grade. 3" to 6" rigid Polyisocyanurate foam
- **Finished Basement Walls:** R-26 below grade; R-39 above grade. 3 ½" closed cell spray foam within 2x4 stud wall cavities plus ½" continuous closed cell spray foam between stud walls and foundation walls with 2 layers of 1" rigid Polyisocyanurate foam panels added to the above-grade wall areas.
- **Doors:** R-5.3 fiberglass exterior doors
- **Heating:** Zoning added to existing high-efficiency furnace with 7-day programmable thermostats.
- **Cooling:** 2-stage high efficiency air conditioner with all-aluminum high efficiency comfort coil.
- **Water heating:** A.O. Smith Vertex condensing hot water heater.
- **Ventilation:** Balanced ventilation system with Energy Recovery Ventilator and house air handler fan integration to circulate fresh air evenly throughout the house at regular intervals.
- **Appliances:** Energy Star minimum rating on all appliances.

Directions by car to the Open House:

- From Rte. 495:
 1. Take Exit 32 Boston Rd.
 2. Left onto Boston Rd. coming from North; Right if coming from South.
 3. Right onto Rte 110 Littleton Rd.
 4. Go 1.5 miles and take a Right onto Rte. 225 Concord Rd.
 5. Go .8 miles and take Left onto Howard Rd.
 6. Go .3 miles and bear Left onto Magnolia Drive.
 7. Take 1st Right onto Heather Lane, then 1st Left onto Primrose Lane.



Westford DER construction begins June 2011



Westford DER: thermal package completed; exterior trim & siding being installed



Westford DER: Attic Insulated



Westford DER: Basement Insulation being installed