



Energy Star Labeled and LEED Certified Watermill

Private Residence

Watermill, NY

Developer:	Joe Farrell
Building Type:	Residential/Single Family Spec Home
Project Type:	Energy Star and LEED for Homes
Building Size:	10,261 sq ft, 8 Bedrooms
Builder :	Farrell Building Company
Status:	Completed June 2009
SWA Contact:	Karla Donnelly
Financial Advisor:	James Grippi, The Carlyle Group

As a company, Farrell Building has a long established history of building solid, well appointed homes so Energy Star and LEED for Homes certification were a natural next step. In January 2008 the integrated project team targeted the LEED for Homes criteria for the Halsey Lane South home and the home was well under construction when the team found themselves ahead of the sustainable building curve; on July 22, 2008, The Town of Southampton adopted Resolution Number 2008-1117 enacting a new energy code requiring all new and substantially reconstructed homes to be Energy Star compliant. Effective October 1, 2009 :

Conditioned SF	HERS Score	HERS Index
3,500	84	80
3,501-4,500	87	65
4,501-6,500	90	50
over 6,500	93	35

Halsey Lane South has flash & batt wall insulation consisting of 1½” closed cell foam & 4” sprayed fiberglass (John Mansville’s, *Spider*), R-26. Below grade 1½” rigid is adhered to interior basement walls with sealed seams (R12 continuous) which leaves framed walls open for rough wiring & plumbing. Insulated mechanical rooms in the attic house the HVAC and a majority of the ducts are buried in the attic floor insulation. The home also has better windows (U 0.29-0.31, SHGC 0.30), high-efficiency Weil McLaine, propane boilers & Lennox XC15 A/ C (SEER 16).

Give the size, it tested well (3.7 ACH50); leakage was notably in second floor ceiling penetrations and the garage rim joists & ceiling. Like most large homes, the bath



exhaust fans tested significantly lower than rated (pulling a range of 24cfm to 67cfm in 8 bathrooms). But indoor air quality was improved with MERV 10 filters, Heat Recovery Ventilators, and Low VOC finishes

The final HERS Score 88.4 (HERS Index 58) indicates a reduced environmental impact and increased resource savings . It also indicates the additional effort necessary for a home this size to comply with Southampton’s new energy code. To reach a HERS Index 35 this project would need to target the following: an insulated (non vented) attic; sprayed or blown (no fiberglass batts) in the garage (ceiling, shared walls, and rim joists); and renewables such as geo thermal ground source heat pumps and/or a large photovoltaic array (approx 20 kW).