HAMILTON WAY



• Option A



• Option B

THE GRISWOLD



Nelson Construction, Inc.

Nelson Construction had a "great deal of focus on the value of energy efficiency before, during, and after the sale of the home." This focus started by optimizing the efficiency of a traditional production home design through solar orientation and a systematic design process—and continued by applying

this optimization to the entire neighborhood of 10 homes. "The company demonstrated a very strong commitment to energy efficiency," the EVHA judges said. "They had an excellent outline of criteria and they clearly demonstrated how those criteria informed the design and selection of materials." Careful parametric analyses performed during the design phase resulted in only a very small increase in sales price—3% excluding PV—due to the home's efficiency features.



Thermomass foundation system

Cold Climate, Production Category

Company Overview

Years in business: 19

Average homes built per year: 20

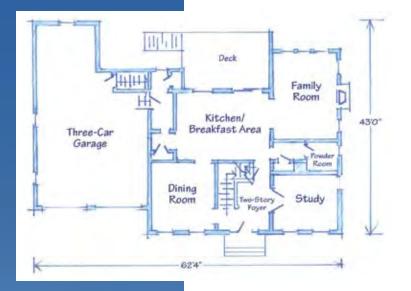
Member: Home Builders Association of Hartford County

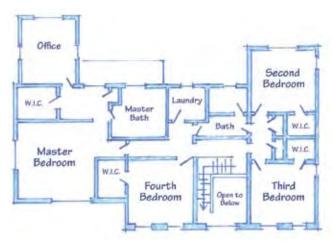
House Overview

Size: 3,128 s.f.

Location: Farmington, Connecticut Construction cost: \$127 per s.f. Completion date: October 2008







Foundation to deck closed cell foam sealing

Energy Features

Foundation: Basement with 2" XPS R-10 sub-slab and poured wall integrated insulation + R-32

Wall Construction: 2x6

Wall Insulation: R-19 spray cellulose + R-12 exterior polyisocyanurate foam sheathing

Rim Joist Insulation: R-36 polyurethane foam

Roof Construction: Rafters

Ceiling Insulation: R-50 blown cellulose Windows: Low-e, gas-filled; U-0.32, SHGC 0.27 HVAC: 93 AFUE furnace; 14 SEER air conditioner

Ducts: All in conditioned space; Minimized duct design with registers at interior walls

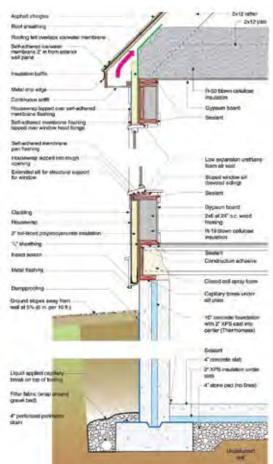
Water Heating: 82 EF tankless gas water heater Lighting: 100% ENERGY STAR fixtures and compact fluorescent lamps

Appliances: ENERGY STAR refrigerator and dishwasher

On-Site Energy Generation: 7 kW photovoltaic system

Duct Leakage Test: 360 cfm total at 25 Pa; 40 cfm to exterior at 25 Pa

Blower Door Test: 1,544 cfm at 50 Pa; 2.48 ACH50 HERS Index: 46 (without PV); 31 (with PV) Energy/Green Building Programs: NAHB Green Building, Building America, Energy Star, DOE Builders Challenge qualified house





Sloped window sill flashing detail



R-6 closed cell spray foam flash seal



