

Application

PARTICIPANT INFORMATION

Company Name: Timberline Panel Company, LLC

Contact Name: Jeff Brooks

Address: 7 Pearl Street

City: Cambridge

State: NY Zip: 12816

Phone: 518 665-8128

Fax: 518 665-8129

Email: jeffbrooks@timberlinepanels.com

Website: www.timberlinepanels.com

CATEGORY ENTRY *(check one category)*

- ☐ Single Family Homes (over 3,000 sq. ft.)
- ☒ Single Family Homes (under 3,000sq ft.)
- ☐ Multi-Family
- ☐ Agricultural
- ☐ Institutional / Industrial / Commercial
- ☐ Renovations

PROJECT INFORMATION

Project Name: Ethos Homes

Address: 1907 Hillside Ave

City: Niskayuna

State: New York Zip: 12309

Date completed: 12/3/2010

Total cost of project (exclusive of land): \$210,000

Dimensions of building (all floors of multi-story building):

2212 Square Feet

BUILT BY *(if different than applicant)*

Company Name: Ethos Homes, LLC

Contact Name: John Blouch

Address: 20 Jordan Lane

City: Glenville

State: New York Zip: 12302

PANELS MANUFACTURED BY *(members only)*

Company Name: Timberline Panel Company, LLC

DESIGNED BY *(if different than applicant – SIPA will only recognize members)*

Company Name: Archicata, LLC

Contact Name: Sergei Domashenko

Address: 33 E Main Street

City: Earlville

State: New York Zip: 13332

PLEASE ANSWER EACH QUESTION WITH AS MUCH DETAIL AS POSSIBLE TO HELP IN THE JUDGING PROCESS

Describe the end use of the building (attach additional pages if necessary)

Single Family residence

How did SIP construction help you get this job?

We worked with the architect to redesign the house to create a very very efficient layout for SIPs. The builder's requirements were low cost, superior energy efficiency & speed of construction which we were able to provide for all with our product & install team

Continued

Specify unique features of why the project is deserving of recognition (new construction techniques, customer problems solved, time / labor savings, financial savings, etc.)

See Attached

What energy-efficient or green building products and / or techniques were incorporated into the building? Please list any local or national energy-efficient or green building certifications earned (ENERGY STAR, LEED, Built Green, etc.)?

See Attached

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HERS Index:

Which elements of the building (floors, walls, roof) were built with structural insulated panels? What thicknesses of SIPs were used?

6.5" EPS wall SIPs

8.25" EPS roof SIPs

Comments you would like in a news release on this building?

See Attached

CHECKLIST

- ☐ My company is a SIPA member. Panels for this project were manufactured by a SIPA member.
- ☐ I have answered ALL the questions completely.
- ☐ I have enclosed the two required electronic images as defined in the SIPA Building Excellence Awards guidelines.

OPTIONAL

- ☐ I have enclosed photographs that display different stages of the building project
- ☐ I have enclosed a floor plan drawing (no larger than 17" x 22" in size)
- ☐ I have enclosed a letter from the building owner regarding the building project
- ☐ I have enclosed a list of local publications (name and full contact information) for press release distribution

PLEASE CONFIRM: I have read and understand the rules for this competition. This entry is structural insulated panel construction as defined in the SIPA Building Excellence Awards guidelines. I understand by making this submission that my pictures will be used by the Structural Insulated Panel Association (SIPA) to promote the use of structural insulated panels. I hereby give permission to SIPA to use the enclosed pictures for any use they see fit in that endeavor. I understand that where possible, SIPA will give credit for pictures used to my company as listed above.

Signature

Date:

Entries received that do not contain all required materials will be returned.

Entries received after Tuesday, March 1, 2011 will not be considered

Complete and return to the SIPA office:

P.O. Box 1699 Gig Harbor, WA 98335
For FedEx or UPS Deliveries ONLY:
6659 Kimball Drive NW, D-404
Gig Harbor, WA 98335
253.858.7472

FOR OFFICE USE ONLY

Entry Number

Date Received

1907 Hillside Ave, Standard Features/Specifications

Thermal Protection:

- Timberline SIPS (Structural Insulated Panel System) walls: R24
- Timber line SIPS roof: R30
- Foundation: Superior Walls, 5000psi concrete, 2.5" XPS foam insulation, R19 fiberglass in bays: R31.5 typical
- Rim and band joist: 1-2" closed cell spray foam plus R19 fiberglass: R25+
- Basement slab: 2" XPS insulation under slab: R10
- Marvin Integrity All-Ultrex casement windows: U=0.31 or less with spectrally selected glazing

Mechanical Systems:

- Bryant 95% efficient, 3 stage natural gas furnace
- Bryant 14 SEER air conditioning
- Humidifier
- MERV8 filter
- Air Cyclor ventilation system
- Panasonic Whispergreen exhaust fans in bathrooms vented to exterior
- Broan kitchen range hood vented to exterior
- Navien tankless hot water heater
- Passive radon system

Exterior

- Fibercement siding from James Hardie with ColorPlus technology (15 year paint warranty)
- Miratec trim with Benjamin Moore paint
- Owens Corning Duration 30 year shingles
- Mansonite fiberglass entry door
- Garage door per plan
- Trex composite decking on porch and porch steps
- Rockwell window wells (window well covers NOT included)

Landscaping

- Asphalt paved driveway from road to garage
- Paver walkway from driveway to porch
- Foundation planting package
- Hydroseeded lawn plus first fertilization
- Grade sloped away from house with swale to carry water to rear of property

Interior

Ethos Homes, LLC

- Overhead lighting in all rooms; lighting meets Energy Star Advanced Lighting Package requirements
- No-VOC interior paint from Mythic
- Standard flooring includes:
 - Living room, dining room, main hallway: 4" red oak hardwood flooring finished with Monocoat VOC free natural oil
 - Kitchen and garage entry: MCT Marmoleum tiles
 - Master bedroom: Cork planks by Oporto
 - Main stairs, second floor hall, second floor bedrooms: carpet
 - Bathrooms: ceramic tile
- Open railing between living room and stairs
- Four cable outlets; two phone outlets

Fixtures

- Energy star ceiling fans with lights in living room and master bedroom
- Delta faucets, tub and shower fixtures
- Homecrest kitchen cabinets per kitchen layout plan; Dover style door and drawers; Cherry Autumn finish
- ShetkaStone kitchen counters
- Two bowl stainless steel sink
- Homecrest bathroom vanities matching kitchen cabinetry
- Granite vanity counters with undermount sinks
- Electric range, Energy Star dishwasher, Energy Star refrigerator

PROJECT INFORMATION

Ethos Homes, LLC
1907 Hillside Ave
Niskayuna, NY 12309

The basic principles behind this building were to provide quality construction using superior insulating materials to yield the most efficient construction / operation ratio. The building location was chosen based on cost as well as potential need & desirability within the particular neighborhood.

The initial design concept for the house was based on the Westford Habitat House from the Building Science Corporation (www.buildingscience.com). Betsy Pettit from the Building Science Corporation was very receptive regarding use of the plans & interested in seeing how this design would evolve & perform when built with SIPs.

The design process involved modifying the Building Science Corporations initial concept to meet the requirements for the site & desires of the potential target buyers. Sergei Domashenko from Archicarta, LLC & Greg Pawlowski from Timberline Panel Company worked jointly to develop the floor plan to work more efficiently with SIPs making the structure extremely cost effective. John Treybal from Engineering Ventures was also a critical participant in providing options for the structural elements to help accommodate the budgetary restraints.

Once on site, Timberline's installations crew was able to set all 1st floor wall panels in a single day. Ethos Homes quickly went to work on the second floor deck ... Timberline then returned & completed the second floor walls & roof panels in an additional two days making the overall panel install timeframe 3 days.

The project was the first SIP project for Ethos Homes, LLC, as well as all the many subcontractors & the local building inspector. The speed of construction for the SIP shell created quite a stir among the participants as well as the neighbors. The home was actually sold to a family that was living in an adjacent apartment building prior to completion of construction.

Overall the house met all of the expectations ... the blower door test came in at .25 with an overall HERS Index of 41. The annual operating costs are estimated at \$1822.

Currently, Ethos Homes & Timberline Panel Company are preparing to build a duplicate (mirror image) of this house on another nearby lot in Niskayuna, NY.

Home Energy Rating Certificate

1907 Hillside

Niskayuna, NY



**5 Stars Plus
Confirmed Rating**

Uniform Energy Rating System

1 Star	1 Star Plus	2 Stars	2 Stars Plus	3 Stars	3 Stars Plus	4 Stars	4 Stars Plus	5 Stars	5 Stars Plus
0-19	20-39	40-49	50-59	60-69	70-79	80-81	81-82	83-85	86-100

Energy Efficient

NY HERS Score: 91.8 / HERS Index: 41

General Information

Conditioned Area:	2212 sq. ft.	HouseType:	Single-family detached
Conditioned Volume:	18680 cubic ft.	Foundation:	Conditioned basement
Bedrooms:	3		

Mechanical Systems Features

Heating:	Fuel-fired air distribution, Natural gas, 95.0 AFUE.
Water Heating:	Instant water heater, Natural gas, 0.98 EF, 0.0 Gal.
Cooling:	Air conditioner, Electric, 13.0 SEER.
Duct Leakage to Outside:	0.00 CFM.
Ventilation System:	Exhaust Only: 80 cfm, 11.3 watts.
Programmable Thermostat:	Heating: Yes Cooling: Yes

Building Shell Features

Ceiling Flat:	NA	Exposed Floor:	NA
Vaulted Ceiling:	R-30	Window Type:	Marvin Integrity*
Above Grade Walls:	R-24	Infiltration:	
Foundation Walls:	R-33.5	Rate:	Htg: 0.25 Clg: 0.25 ACH50
Slab:	R-10.0 Edge, R-0.0 Under	Method:	Blower door test

Lights and Appliance Features

Percent Fluorescent Pin-Based:	10.00	Clothes Dryer Fuel:	Natural gas
Percent Fluorescent CFL:	90.00	Range/Oven Fuel:	Natural gas
Refrigerator (kWh/yr):	422.00	Ceiling Fan (cfm/Watt):	0.00
Dishwasher Energy Factor:	0.46		

The Home Energy Rating Standard Disclosure for this home is available from the rating provider.

REM/Rate - Residential Energy Analysis and Rating Software v12.9 New York

This information does not constitute any warranty of energy cost or savings.

© 1985-2010 Architectural Energy Corporation, Boulder, Colorado

Rating Number:

Certified Energy Rater: Donald Bowles

Rating Date: 12/2/2010

Rating Ordered For:

Estimated Annual Energy Cost

Use	Confirmed Rating		
	MMBtu	Cost	Percent
Heating	31.2	\$531	29%
Cooling	2.0	\$108	6%
Hot Water	12.7	\$206	11%
Lights/Appliances	21.7	\$856	47%
Photovoltaics	-0.0	\$-0	-0%
Service Charges		\$120	7%
Total		\$1822	100%

**This home meets or exceeds the minimum
criteria for all of the following:**

2006 International Energy Conservation Code

2009 International Energy Conservation Code

Energy Conservation Construction Code of New York

TITLE HERS Rater

Company Newport Ventures

Address 22 Jay Street

City, State, Zip Schenectady, NY, 123

Phone # 518-377-9410

Fax #

Don Bowles

Certified Energy Rater



An ENERGY STAR® Version 2 Qualified Home

This home built at

1907 Hillside, Niskayuna, NY

by Ethos Homes, LLC

has been verified by Newport Ventures, an independent professional or organization,
to meet or exceed strict energy efficiency guidelines
set by the U.S. Environmental Protection Agency.

NY HERS Score: 91.8 / HERS Index: 41

12/2/2010

www.energystar.gov

A handwritten signature in black ink, appearing to read "Sam Rashkin".

Sam Rashkin
National Director
ENERGY STAR for Homes

ENERGY STAR VERSION 2 HOME REPORT

Date: December 07, 2010

Rating No.:

Building Name: 1907 Hillside

Rating Org.: Newport Ventures

Owner's Name:

Phone No.: 518.377.9410

Property: 1907 Hillside

Rater's Name: Donald Bowles

Address: Niskayuna, NY

Rater's No.: R0155

Builder's Name: Ethos Homes, LLC

Weather Site: Albany, NY

Rating Type: Confirmed Rating

File Name: 1907_Hillside[1].blg

Rating Date: 12/2/2010

Normalized, Modified End-Use Loads (MMBtu/year)

	ENERGY STAR	As Designed
Heating:	50.2	16.6
Cooling:	11.0	6.4
Water heating:	9.9	2.6
Lighting & Appliances:	22.3	25.1
Total:	93.3	50.7
HERS Index:	80	41
NY HERS Score:	84.0	91.8

ENERGY STAR Mandatory Requirements

<input checked="" type="checkbox"/> Thermal Bypass Inspection Checklist	<input checked="" type="checkbox"/> ENERGY STAR Products
<input checked="" type="checkbox"/> Ductwork Requirements	<input checked="" type="checkbox"/> ENERGY STAR Scoring Exceptions

This home MEETS OR EXCEEDS the energy efficiency requirements for designation as an EPA ENERGY STAR Qualified Home.

Pollution Prevented

Type of Emissions	Reduction
Carbon Dioxide (CO2) - tons/yr	5.5
Sulfur Dioxide (SO2) - lbs/yr	5.0
Nitrogen Oxides (NOx) - lbs/yr	13.6

Energy Cost Savings (\$/year)

Heating:	\$1251
Cooling:	\$136
Water Heating:	\$124
Lights & Appliances:	\$153
Total:	\$1665

The energy savings and pollution prevented are calculated by comparing the Rated Home to the Reference Home as defined in the "Mortgage Industry National Home Energy Rating Systems Standards" as promulgated by the Residential Energy Services Network (RESNET). In accordance with these guidelines, building inputs affecting setpoints, infiltration rates, window shading and the existence of mechanical systems may have been changed prior to calculating loads.

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