

NESEA ZERO NET ENERGY BUILDING AWARD

Annual Energy Performance Data

Applicant Information

Name	Mary Kraus & John Fabel	Company	Kraus-Fitch Architects, Inc.
Address	120 Pulpit Hill Road #14	E-Mail	mkraus@krausfitch.com
City	Amherst	Phone	(413) 549-5799
State	MA	Zip Code	1002
		Fax	

Project Summary

Project name	Kraus-Fabel ZNE Renovation	Location (city, state)	Amherst, MA
Building type	Residence, half of duplex, condo unit	Completion date	23-Nov-10
Owner	Mary Kraus & John Fabel	Date occupied	18-Aug-94
	Number of days per year the building is fully occupied		365
	Typical number of occupants during that period		3
	Number of months or years included in the data (12 month minimum required)		12
	Dates of the 'record year' (1-yr period with complete data from which panel will judge bldg.)		12/3/10 - 12/3/11
Conditioned space (in square feet)	1,596	Heating degree days (65°F base)	6361
Unconditioned space (in square feet)	0	Cooling degree days (65°F base)	832
Other (in square feet)	0	Degree day data can be found at www.degreedays.net	
Total building square footage	1,596	(NESEA may confirm and/or adjust to insure uniform reporting of entries.)	
Project cost (round to nearest dollar)	62,088		
Cost per square foot	39		

Optional: If there was a perceived incremental cost for greening the building and/or integrated design, please quantify in cost/sq. ft. or %. Explain, if appropriate.

This is the cost of the ZNE renovation. Does not include original cost of construction in 1994.

Annual Energy Imported, Exported and Site-Produced for All Building Functions

NET IMPORTED ENERGY (imported/bought = '+', exported/sold = '-')	Units	Amount	(E)stimated (A)ctual	BTU/Unit	Total BTU Used
Net electricity purchased off site	kWh	-431	A	3,413	-1,471,003
Natural gas	Therms	0	A	100,000	0
Propane	Gallons	0	A	91,600	0
#2 petroleum fuel oil	Gallons	0	A	138,200	0
Cordwood	Cord	0	A	20,000,000	0
Biomass: chips (supply BTU documentation)	Ton	0	A		0
Biomass: pellets (supply BTU documentation)	Ton	0	A	16,500,000	0
Biofuel/fuel oil blend: specify #, ratio, adjust BTUs/gal. if necessary	Gallons	0	A	117,010	0
Other fuel (specify)		0	A		0
Net Imported Energy Total					-1,471,003
Net Imported Energy Intensity* (BTU/sq. ft./year)					-922

SITE PRODUCED ENERGY

Solar electric (used and net export)	kWh	7,023	A	3	21,069
Solar thermal (produced and used onsite)	BTU	3,900,000	E	1	3,900,000
Wind (used and net export)	kWh	0	A	3	0
Micro-hydro (used and net export)	kWh	0	A	3	0
Site-produced Energy Total					3,921,069

Total Site Produced Energy Intensity* (BTU/sq. ft./year) **2,457**

* Total net from 1 year of utility bills; 1 year audit report from utility must include complete time period. Audit should be sent directly to NESEA from your utility (mail, fax or email). Note: '-'= utility credit and '+' = utility charges

Annual Energy by End-Use (optional - complete if possible)

Heating (enter appropriate BTU amount from above)	BTU	12,000,000	E	1	1200000000%
Cooling	kWh	150	E	3.41	51150%
Fans and pumps	kWh	230	E	3.41	78430%
Domestic hot water (enter appropriate BTU amount from above)	BTU	7,100,000	E	1	710000000%
Plug loads and equipment	kWh	1,812	E	3.41	617892%
Other end use (specify and enter appropriate BTUs from above)			E or A?		0%