

# Home Energy Rating Certificate

5 Larussi Way  
Medway, MA 02053



**5 Stars Plus**  
**Verified Condition**

## Uniform Energy Rating System

| Uniform Energy Rating System |             |         |              |         | Energy Efficient |         |              |         |              |
|------------------------------|-------------|---------|--------------|---------|------------------|---------|--------------|---------|--------------|
| 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 |
| 500-401                      | 400-301     | 300-251 | 250-201      | 200-151 | 150-101          | 100-91  | 90-86        | 85-71   | 70 or Less   |

HERS Index: **54**

### General Information

Conditioned Area: 3743 sq. ft.      HouseType: Single-family detached  
 Conditioned Volume: 33686 cubic ft.      Foundation: Unconditioned basement  
 Bedrooms: 4

### Mechanical Systems Features

Ground-source heat pump: Electric, Htg: 3.0 COP. Clg: 15.0 EER.  
 Ground-source heat pump: Electric, Htg: 3.0 COP. Clg: 15.0 EER.  
 Water Heating: Ground source heat pump, Electric, 1.20 EF, 80.0 Gal.  
 Duct Leakage to Outside: 108.46 CFM.  
 Ventilation System: Balanced: ERV, 62 cfm, 121.0 watts.  
 Programmable Thermostat: Heating: Yes      Cooling: Yes

### Building Shell Features

Ceiling Flat: R-52      Exposed Floor: R-30  
 Vaulted Ceiling: R-34      Window Type: U:0.31, SHGC:0.37\*  
 Above Grade Walls: R-19, R-13      Infiltration:  
 Foundation Walls: R-0.0      Rate: Htg: 1537 Clg: 1537 CFM50  
 Slab: None      Method: Blower door test

### Lights and Appliance Features

Percent Fluorescent Pin-Based: 10.00      Clothes Dryer Fuel: Electric  
 Percent Fluorescent CFL: 90.00      Range/Oven Fuel: Electric  
 Refrigerator (kWh/yr): 560.00      Ceiling Fan (cfm/Watt): 0.00  
 Dishwasher Energy Factor: 0.84

Rating Number: 48411

Certified Energy Rater: William D'Arrigo

Rating Date: 12/19/08

Rating Ordered For: Taniel Bedrosian

## Estimated Annual Energy Cost

| Use               | Verified Condition |               |             |
|-------------------|--------------------|---------------|-------------|
|                   | MMBtu              | Cost          | Percent     |
| Heating           | 23.4               | \$758         | 30%         |
| Cooling           | 3.9                | \$128         | 5%          |
| Hot Water         | 11.3               | \$365         | 14%         |
| Lights/Appliances | 37.5               | \$1215        | 48%         |
| Photovoltaics     | -0.0               | \$-0          | -0%         |
| Service Charges   |                    | \$77          | 3%          |
| <b>Total</b>      |                    | <b>\$2543</b> | <b>100%</b> |

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

TITLE

Company

Address

City, State, Zip

Phone #

Fax #

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

REM/Rate - Residential Energy Analysis and Rating Software v12.6

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

© 1985-2008 Architectural Energy Corporation, Boulder, Colorado.



## ENERGY STAR HOME VERIFICATION SUMMARY

|                 |                      |               |                             |
|-----------------|----------------------|---------------|-----------------------------|
| Date:           | December 22, 2008    | Rating No.:   | 48411                       |
| Building Name:  | BECo                 | Rating Org.:  | Conservation Services Group |
| Owner's Name:   | Taniel Brodesian     | Phone No.:    | 508-836-9500                |
| Property:       | 5 Inassaí Way        | Rater's Name: | William D'Arrigo            |
| Address:        | Medway, MA 02053     | Rater's No.:  | NC 27                       |
| Builder's Name: | ALMIK Const. Co. Inc |               |                             |
| Weather Site:   | Medway, MA           | Rating Type:  | Verified Condition          |
| File Name:      | V12.6_48411_WD.blg   | Rating Date:  | 12/19/08                    |

### Building Information

|                                |       |                  |                        |
|--------------------------------|-------|------------------|------------------------|
| Conditioned Area (sq ft):      | 3743  | Housing Type:    | Single-family detached |
| Conditioned Volume (cubic ft): | 33686 | Foundation Type: | Unconditioned basement |
| Insulated Shell Area (sq ft):  | 8776  | HERS Index:      | 54 *****               |
| Number of Bedrooms:            | 4     |                  |                        |

### Building Shell

|                        |                            |                        |                           |
|------------------------|----------------------------|------------------------|---------------------------|
| Ceiling w/Attic:       | R52,CE14",4-16 U=0.019     | Window/Wall Ratio:     | 0.17                      |
| Vaulted Ceiling:       | R30,FG1,10-16,+5,C U=0.031 | Window Type:           | U:0.31, SHGC:0.37*        |
| Above Grade Walls:     | R19,CE1.5-16 U=0.061       | Window U-Value:        | 0.310                     |
| Found. Walls (Cond):   | None                       | Window SHGC:           | 0.370                     |
| Found. Walls (Uncond): | Uninsulated                | Infiltration:          | Htg: 1537 Cig: 1537 CFM50 |
| Frame Floors:          | R30,FG2,X-16 U=0.040       | Measured Duct Leakage: | 108.46 CFM25              |
| Slab Floors:           | None                       | Leakage to Outside:    | 108.46 CFM                |

### Mechanical Systems

|                          |  |
|--------------------------|--|
| GSHP:                    | Htg: 61.1 kBtu/h, 3.0 COP. Cig: 36.0 kBtu/h, 15.0 EER. |
| GSHP:                    | Htg: 61.1 kBtu/h, 3.0 COP. Cig: 36.0 kBtu/h, 15.0 EER. |
| Water Heating:           | Ground source heat pump, Elec, 1.20 EF.                |
| Programmable Thermostat: | Heat=Yes; Cool=Yes                                     |

Note: Where feature level varies in home, the dominant value is shown.

This home **MEETS OR EXCEEDS** the EPA's requirements for an ENERGY STAR Home.

REM/Rate - Residential Energy Analysis and Rating Software v12.6

This information does not constitute any warranty of energy cost or savings.  
© 1985-2008 Architectural Energy Corporation, Boulder, Colorado.