Alaska Housing Finance Corporation

Energy Efficiency Programs and Resources Overview
BEES

Building Energy Efficiency Standard

Established 1992

Promote construction of energy-efficient buildings

IECC 2012
ASHRAE 62.2
AK Amendments
HERS Home Energy Rating System

AkWarm Energy Modeling Software

Home Energy Rating Certificate

The Home Located At:
This Street
Palmer, Alaska

Has Been Energy-Rated As:
Five Star

Overall Efficiency of Home
90.4 points

BEES Compliance
Pass

Amount of CO2 Produced by the Home
27,771 pounds per year

Breakdown of Heating Costs, $ Per Year
Floor $55
Wall/Door $305
Window $83
Ceiling $55
Air/Vent $199
Htg System Loss $272
Hot Water $301

Projected Annual Energy Costs
$2,539 per year

Client: One Awesome House
Rater: My Rater, Here in Ak.
Date: 9/22/2012
Location: Anchorage, AK 99504
Contact: 2140
Rating Type: BEES, Rebate ID: 21440

I certify that this Rating is true and correct, to the best of my knowledge and belief:
Rater Signature

4300 Boniface Parkway | Anchorage, Alaska 99504 | P.O. Box 105020 | Anchorage, Alaska 99510
www.akhousing.com | AlaskaHousingFHC.org | AlaskaHousing.org | AlaskaHousing.com
ARIS
Alaska Retrofit Information System

- AHFC’s ARIS database has become the clearinghouse for information on Alaska buildings
- More than 75,000 unique records
- Information from the database may be used for policy decisions, research, program measurement, studies and reports, and much more
2014 Housing Needs Assessment

Census Area Profile for: Juneau City and Borough
AMCSA Region: Southeast Corporation
Regional Housing Authority: Tongass-Haida Regional Housing Authority
BEES Climate Zone (Heating Degree Day Range): Zone 6 (7,200 - 9,000 HDD)

Figure C1: Existing Housing by Decade Built

Figure C2: Population

Figure C3: Trends in Housing Unit Size

Figure C4: Housing Units Completing an AHFC Energy Program after 2007

Juneau City and Borough
Energy Efficiency Home Calculator

Outreach is underway to the industry including: Appraisers, Lenders, Realtors, Contractors, etc.
Energy Efficiency Home Calculator

### ARIS Search Criteria

*Note: The ARIS Search feature is optional. If you already have comparable home utility bill information and do not wish to search the ARIS database, click the Skip button below.*

Enter search criteria in the form below. Typically search criteria is similar to the subject home being appraised. At a minimum, please select a community and at least two other home areas before generating search results.

#### Home Details

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td>Anchorage</td>
</tr>
<tr>
<td>Street Name</td>
<td>lake ots</td>
</tr>
<tr>
<td>Street Suffix</td>
<td>PKWY</td>
</tr>
<tr>
<td>Matched Precinct</td>
<td>480</td>
</tr>
<tr>
<td>Number of Bedrooms</td>
<td>3</td>
</tr>
<tr>
<td>Rating Points</td>
<td>83 (+/- 2)</td>
</tr>
<tr>
<td>Square Feet</td>
<td>1800 (+/- 200) Sq Ft</td>
</tr>
<tr>
<td>Year Built</td>
<td>1981 (+/- 5) Years</td>
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</table>

#### Fuel Types

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
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<tbody>
<tr>
<td>Utility Costs Cover</td>
<td>Full House Energy</td>
</tr>
<tr>
<td>Space Heating Fuel</td>
<td>Natural Gas</td>
</tr>
<tr>
<td>DHW Fuel</td>
<td>Natural Gas</td>
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</table>
AHFC Building Monitoring

Charts and Reports

Group: Residential  Facility: Glacierview  Report: Dashboard

Glacierview Dashboard

Boiler #1 Alarm  Boiler #2 Alarm

Boiler Info

Primary Loop Temp  Bldg Heating Supply T

Domestic Hot Water

DHW Temp to Bldg  DHW Return Temp  DHW Temp from Tanks

This website is funded by the Alaska Housing Finance Corporation.
Weatherization Program

- Health and Safety
- Energy Efficiency
- Homeowner Education
- Comfort
- Building Durability
Home Energy Rebate Program

Open to all Alaskans

No income requirements

Owner-occupied, year-round residences

Homeowners pay upfront and are then rebated

“As-Is & Post” energy ratings
New Home Rebate for New Construction

<table>
<thead>
<tr>
<th>Points</th>
<th>Rating</th>
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<tbody>
<tr>
<td>0-39</td>
<td>1 Star</td>
</tr>
<tr>
<td>40-49</td>
<td>1 Star +</td>
</tr>
<tr>
<td>50-59</td>
<td>2 Star</td>
</tr>
<tr>
<td>60-67</td>
<td>2 Star +</td>
</tr>
<tr>
<td>68-72</td>
<td>3 Star</td>
</tr>
<tr>
<td>73-77</td>
<td>3 Star +</td>
</tr>
<tr>
<td>78-82</td>
<td>4 Star</td>
</tr>
<tr>
<td>83-88</td>
<td>4 Star +</td>
</tr>
<tr>
<td>89-91</td>
<td>5 Star</td>
</tr>
<tr>
<td>92-94</td>
<td>5 Star +</td>
</tr>
<tr>
<td>95-100</td>
<td>6 Star</td>
</tr>
</tbody>
</table>

$7,000 rebate for 5 Star Plus

$10,000 rebate for 6 Star
Supplemental Housing Development Grant Program

Established 1981 to supplement HUD Indian Housing Development funds

Funds are used for:

• Water and sewer facilities
• Roads
• Electrical systems
• Energy efficiency measures

Employs local workers and buildings meet BEES
Alaska Energy Efficiency Revolving Loan Program (AEERLP)

$250 million in bond authority for energy efficiency improvements:

- Schools
- University of Alaska
- State facilities
- Municipal facilities

Savings from energy efficiency improvements may be used to pay off the loan
Energy Efficiency Interest Rate Reduction

Finance with AHFC

Applies to first $200,000 of the loan amount

New Construction or Retrofit
Second Mortgage for Energy Conservation Loan

Second mortgage up to $30,000

15 Year Loan at the current rate

Partner with Alaska USA Federal Credit Union
Energy Efficiency Education

Free workshops throughout the state and regularly in South-Central
Thank You