

Application

PARTICIPANT INFORMATION

Company Name: _____

Contact Name: _____

Address: _____

City: _____

State: _____ Zip: _____

Phone: _____

Fax: _____

Email: _____

Website: _____

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: _____

Address: _____

City: _____

State: _____ Zip: _____

Date completed: _____

Total cost of project (exclusive of land): _____

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

BUILT BY *(if different than applicant)*

Company Name: _____

Contact Name: _____

Address: _____

City: _____

State: _____ Zip: _____

PANELS MANUFACTURED BY *(members only)*

Company Name: _____

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

Company Name: _____

Contact Name: _____

Address: _____

City: _____

State: _____ Zip: _____

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)

How did SIP construction help you get this job?

Continued

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

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.)?

HERS Index:

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

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

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

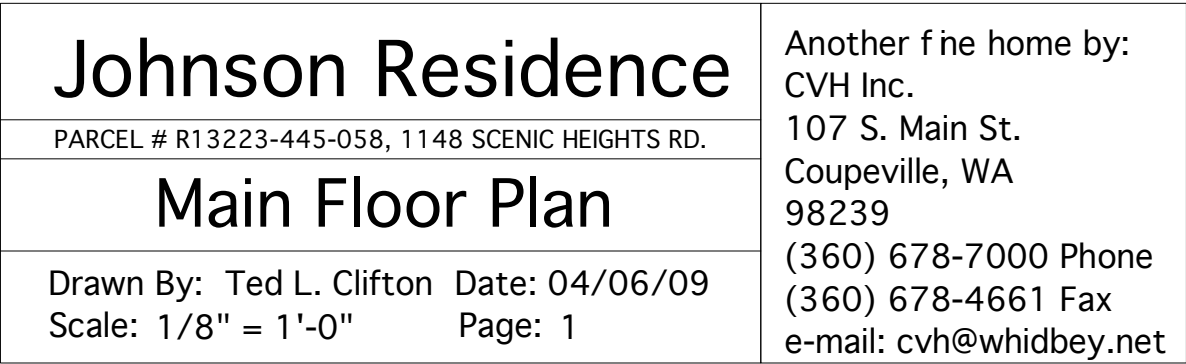
2011 SIPA Building Excellence Awards



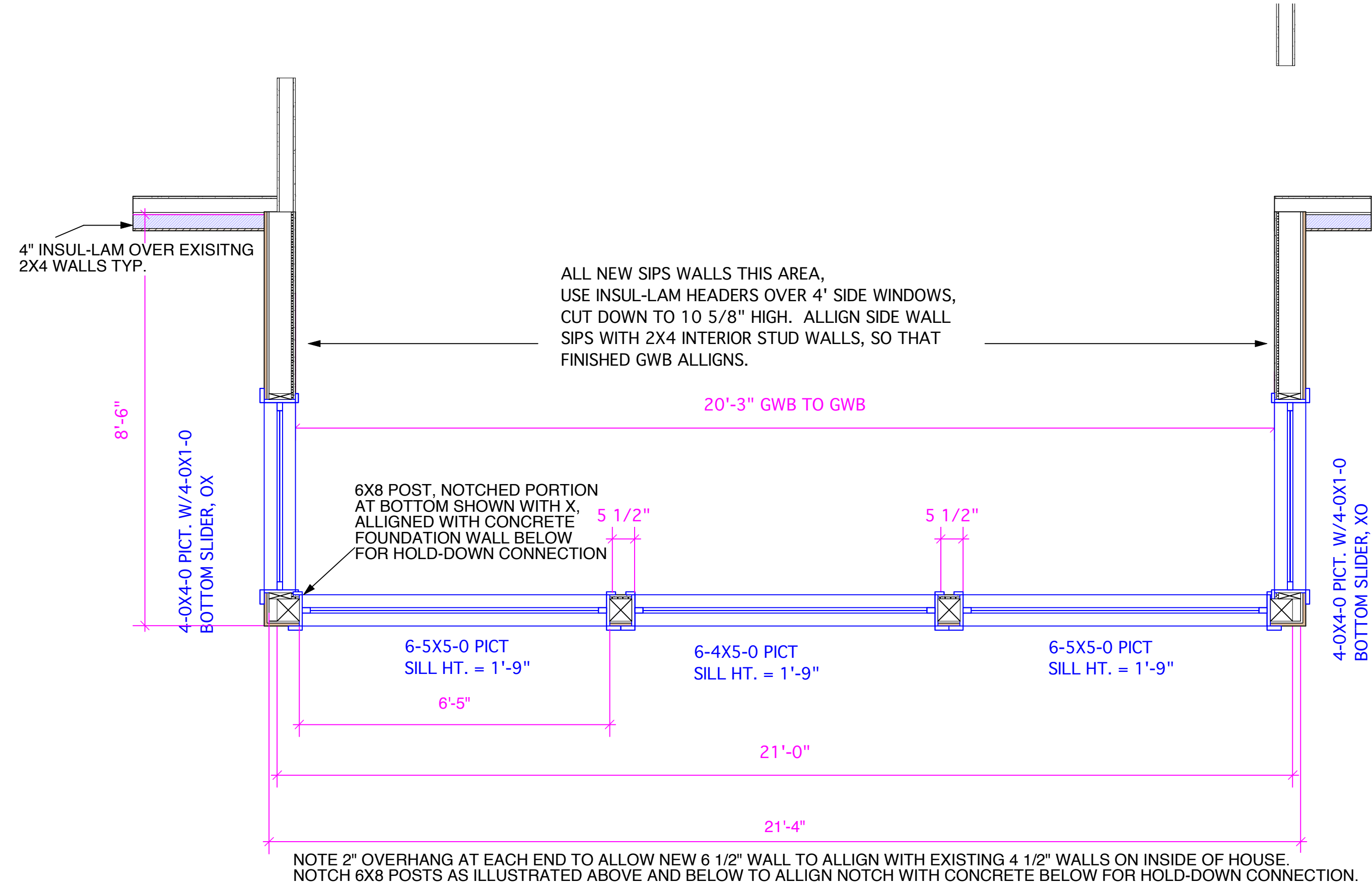




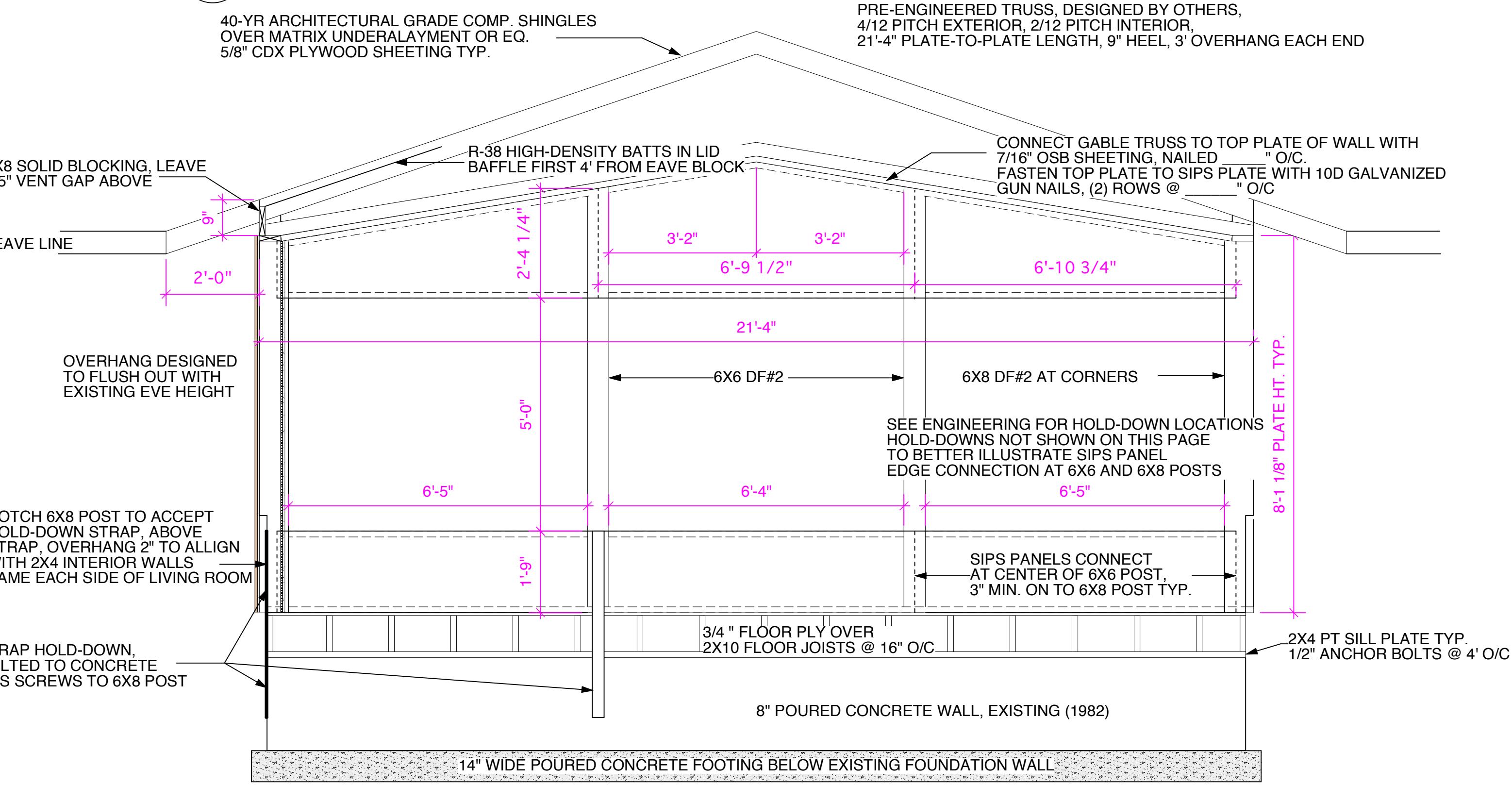




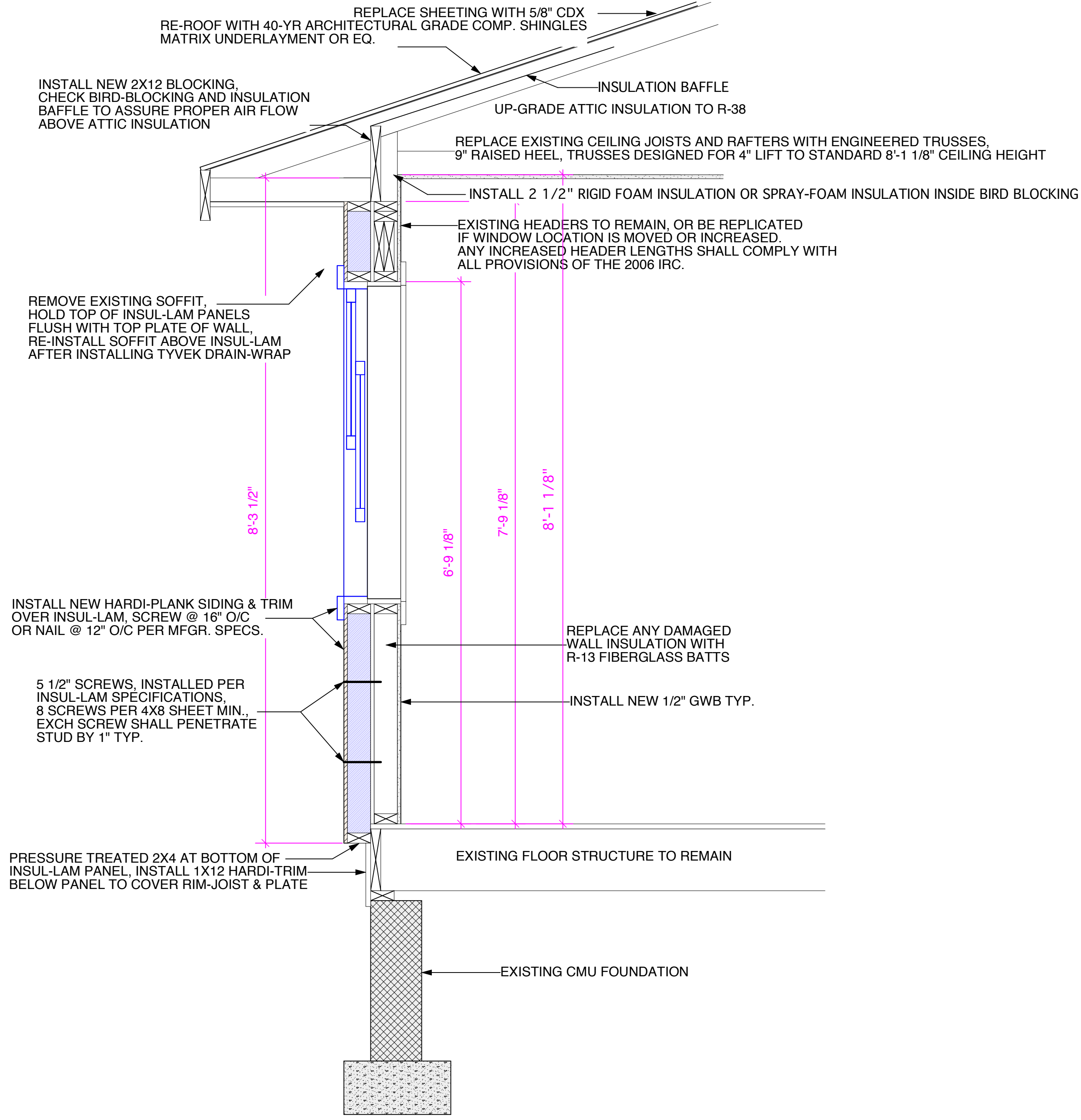
Another fine home by:
CVH Inc.
107 S. Main St.
Coupeville, WA
98239
(360) 678-7000 Phone
(360) 678-4661 Fax
e-mail: cvh@whidbey.r



1
S-1 TOP PLAN VIEW OF LIVING ROOM FRONT WALL



2
S-1 ELEVATION VIEW OF LIVING ROOM FRONT WALL



3
S-1 TYPICAL WALL SECTION WITH INSUL-LAM SCALE: 1/2" = 1'-0"

Johnson Residence		Another f ne home by: CVH Inc.
PARCEL # R13223-445-058, 1148 SCENIC HEIGHTS RD.		107 S. Main St. Coupeville, WA 98239
STRUCTURAL DETAILS		(360) 678-7000 Phone (360) 678-4661 Fax e-mail: cvh@whidbey.net
Drawn By: Ted L. Clifton	Date: 04/06/09	
Scale:	Page:	

ACTION REPORT

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

The following table identifies and ranks energy use and cost by building component. A maximum of six components are shown. Current mechanical equipment is assumed for this analysis. To determine the impact of varying the equipment efficiency, change the equipment specified in the building file and perform the energy calculations again.

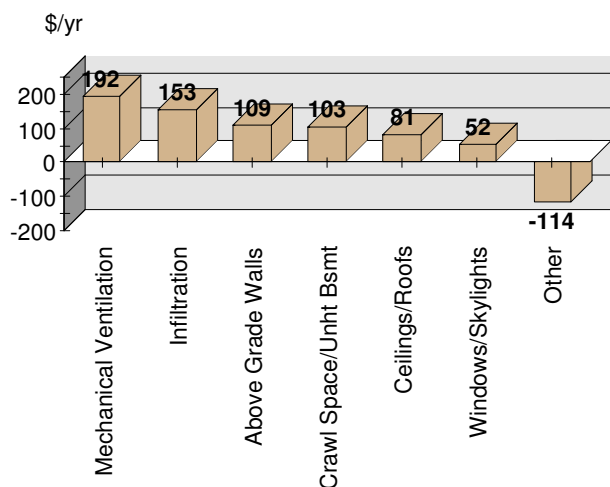
ANNUAL ENERGY PROFILE

Energy End-Use	Component	Consumption (MMBtu/yr)		Cost (\$/yr)
HEATING	Mechanical Ventilation	7.6	\$	192
	Infiltration	6.1	\$	153
	Above Grade Walls	4.3	\$	109
	Crawl Space/Unht Bsmt	4.1	\$	103
	Ceilings/Roofs	3.2	\$	81
	Windows/Skylights	2.1	\$	52
	Other	-4.5	\$	-114
	Total	22.8	\$	577
WATER HEATING	Water Heater	11.5	\$	294
LIGHTS & APPLIANCES	Lights & Appliances	29.4	\$	748

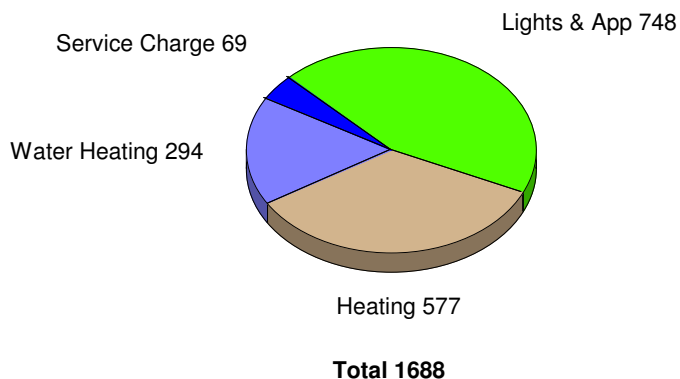
ACTION REPORT

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

Heating Cost (\$/yr)



Annual Energy Cost (\$/yr)



AIR LEAKAGE REPORT

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

Whole House Infiltration

	Blower door test	
	Heating	Cooling
Natural ACH:	0.22	0.21
ACH @ 50 Pascals:	5.25	5.25
CFM @ 25 Pascals:	1424	1424
CFM @ 50 Pascals:	2234	2234
Eff. Leakage Area:	122.7	122.7
Specific Leakage Area:	0.00029	0.00029
ELA/100 sf shell:	1.43	1.43

Total Duct Leakage to Outside

CFM @ 25 Pascals:	N/A
CFM25 / CFMfan:	N/A
CFM25 / CFA:	N/A
CFM per Std 152:	N/A
CFM per Std 152 / CFA:	N/A
CFM @ 50 Pascals:	N/A
Eff. Leakage Area:	N/A
Thermal Efficiency:	0.00

Ventilation

Mechanical:	Balanced
Sensible Recovery Eff. (%):	0.0
Total Recovery Eff. (%):	0.0
Rate (cfm):	240
Hours/Day:	12.0
Fan Watts:	110.0
Cooling Ventilation:	Natural Ventilation

ASHRAE 62.2 - 2003 Ventilation Requirements

For this home to comply with ASHRAE Standard 62.2 - 2003 Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential cfm of mechanical ventilation must be provided continuously, 24 hours per day. Alternatively, an intermittently operating mechanic be used if the ventilation rate is adjusted accordingly. For example, a 103 cfm mechanical ventilation system would need to operat long as the system operates to provide required average ventilation once each hour.

BUILDING FILE REPORT

File Name: CVH-Johnson 5.25 ACH50.blg

Date: March 29, 2010

Property/Builder:		Rating	
Building Name:	Johnson	Org. Name:	Pinnacle Inspections
Owner's Name:	Johnson	Address:	370 N East Camano Drive #5208
Property Address:	1144 Scenic View Heights	City, St, Zip:	Camano Island, WA 98282
City, St, Zip:	Oak Harbor, WA 98277	Phone No:	360-920-4234
Phone No:		Website:	www.pinnacleinspection.com
Builder's Name:	CVH	Rater's Name:	Robert Stockmann
Phone No:	360-678-7000	Rater's Email:	robert@pinnacleinspection.com
Email Address:	ted@zero-energyplans.com	Rater's No.:	WAHERS004
Model:		Rating Date:	3.15.10
Development:		Rating Type:	Site Visit
		Reason:	New Home
		Rating No.:	1

General Building Information

Area of Cond. Space(sq ft):	2908
Volume of Cond. Space:	25535
Year Built:	2009
Housing Type:	Single-family detached
Level Type(Apartments Only):	None
Floors on or Above-Grade:	1
Number of Bedrooms:	2
Foundation Type:	Enclosed crawl space
Enclosed Crawl Space Type:	Vented
Thermal Boundary Location:	REM Default

Foundation Wall Info:		1	
Name			
Library Type	Uninsulated0*		
Length(ft)	230.0		
Total Height(ft)	3.0		
Depth Below Grade(ft)	2.0		
Height Above Grade(ft)	1.0		
Location	Enclsd cowl->amb/grnd		
Uo Value	0.405		

BUILDING FILE REPORT

Johnson

Page 2

Foundation Wall: Uninsulated0*

Type: Solid concrete or stone
Thickness(in): 8.0
Studs: None

Interior Insulation:

Continuous R-Value: 0.0
Frame Cavity R-Value: 0.0
Cavity Insulation Grade: 1.0
Ins top: 0.0 ft from top of wall
Ins Bottom: 0.0 ft from bottom of wall

Exterior Insulation:

R-Value: 0.0
Ins top: 0.0 ft from top of wall
Ins bottom: 0.0 ft below grade

Note:

Frame Floor Info:	1	2	3
Name	Crawlspace	Under Slab	Additions
Library Type	R-30 Main Floor*	R-20 XPS Floor	R-25
Area (sq ft)	2158	256	494
Location	Btwn cond & enclsd crwl	Btwn cond & ambient	Btwn cond & ambient
Uo Value	0.037	0.043	0.040

BUILDING FILE REPORT

Johnson

Page 3

Frame Floor: R-30 Main Floor*

Information From Quick Fill Screen:

Continuous Insulation R-Value	0.0
Cavity Insulation R-Value	30.0
Cavity Insulation Thickness (in.)	12.0
Cavity Insulation Grade	2.0
Joist Size (w x h, in)	1.5 x 12.0
Joist Spacing (in oc)	16.0
Framing Factor - (default)	0.1300
Floor Covering	CARPET

Note:

Layers	Paths		
	Cavity	Framing	Grade
Inside Air Film	0.920	0.920	0.920
Floor covering	1.230	1.230	1.230
Subfloor	0.820	0.820	0.820
Cavity ins	30.000	0.000	0.000
Continuous ins	0.000	0.000	0.000
Framing	0.000	15.000	0.000
	0.000	0.000	0.000
Outside Air Film	0.920	0.920	0.920
Total R-Value	33.890	18.890	3.890
U-Value	0.030	0.053	0.257
Relative Area	0.850	0.130	0.020
UA	0.025	0.007	0.005

Total Component UA: 0.037

Total Component Area: 1.0

Component Uo: 0.037

BUILDING FILE REPORT

Johnson

Page 4

Frame Floor: R-20 XPS Floor

Information From Quick Fill Screen:

Continuous Insulation R-Value	20.0
Cavity Insulation R-Value	0.0
Cavity Insulation Thickness (in.)	4.0
Cavity Insulation Grade	1.0
Joist Size (w x h, in)	1.5 x 4.0
Joist Spacing (in oc)	48.0
Framing Factor - (default)	0.0675
Floor Covering	TILE

Note: 4" XPS Floor System-Rigid Under Slab

Layers	Paths		
	Cavity	Framing	Grade
Inside Air Film	0.920	0.920	0.920
Floor covering	0.050	0.050	0.050
Subfloor	0.820	0.820	0.820
Cavity ins	0.000	0.000	0.000
Continuous ins	20.000	20.000	20.000
Framing	0.000	5.000	0.000
	0.000	0.000	0.000
Outside Air Film	0.920	0.920	0.920
Total R-Value	22.710	27.710	22.710
U-Value	0.044	0.036	0.044
Relative Area	0.933	0.068	0.000
UA	0.041	0.002	0.000

Total Component UA: 0.043

Total Component Area: 1.0

Component Uo: 0.043

BUILDING FILE REPORT

Johnson

Page 5

Frame Floor: R-25

Information From Quick Fill Screen:

Continuous Insulation R-Value	0.0
Cavity Insulation R-Value	25.0
Cavity Insulation Thickness (in.)	8.5
Cavity Insulation Grade	1.0
Joist Size (w x h, in)	1.5 x 8.5
Joist Spacing (in oc)	16.0
Framing Factor - (default)	0.1300
Floor Covering	HARDWOOD

Note:

Layers	Paths		
	Cavity	Framing	Grade
Inside Air Film	0.920	0.920	0.920
Floor covering	0.680	0.680	0.680
Subfloor	0.820	0.820	0.820
Cavity ins	25.000	0.000	0.000
Continuous ins	0.000	0.000	0.000
Framing	0.000	10.625	0.000
	0.000	0.000	0.000
Outside Air Film	0.920	0.920	0.920
Total R-Value	28.340	13.965	3.340
U-Value	0.035	0.072	0.299
Relative Area	0.870	0.130	0.000
UA	0.031	0.009	0.000

Total Component UA: 0.040

Total Component Area: 1.0

Component Uo: 0.040

BUILDING FILE REPORT

Johnson

Page 6

Rim and Band Joist:	1		
Name	Band Joist		
Area(sq ft)	240.0		
Continuous Ins	20.0		
Framed Cavity Ins	21.0		
Cavity Ins Thk(in)	10.0		
Joist Spacing	16.0		
Location	Cond -> ambient		
Uo Value	0.023		

Above-Grade Wall:	1	2	
Name	R-13 + NB		
Library Type	R-13 + 4" NB	R-13	
Gross Area(sq ft)	2184.00	344.00	
Exterior Color	Medium	Medium	
Location	Cond -> ambient	Cond -> garage	
Uo Value	0.030	0.085	

BUILDING FILE REPORT

Johnson

Page 7

Above-Grade Wall: R-13 + 4" NB

Information From Quick Fill Screen:

Standard Wood Frame

Continuous Insulation (R-Value)	20.0
Frame Cavity Insulation (R-Value)	13.0
Frame Cavity Insulation Thickness (in)	3.5
Frame Cavity Insulation Grade	1
Stud Size (w x d, in)	1.5 x 3.5
Stud Spacing (in o.c.)	16.0
Framing Factor - (default)	0.2300
Gypsum Thickness (in)	0.5

Note: R-13 Fiberglass Stud + 4"XPS Nail Base Exterior Skin

Layers	Paths		
	Cavity	Framing	Grade
Inside Air Film	0.680	0.680	0.680
Gyp board	0.450	0.450	0.450
Air Gap/Frm	0.000	0.000	0.000
Cavity ins/Frm	13.000	4.375	1.030
Continuous ins	20.000	20.000	20.000
Ext Finish	0.940	0.940	0.940
	0.000	0.000	0.000
Outside Air Film	0.170	0.170	0.170
Total R-Value	35.240	26.615	23.270
U-Value	0.028	0.038	0.043
Relative Area	0.770	0.230	0.000
UA	0.022	0.009	0.000

Total Component UA: 0.030

Total Component Area: 1.0

Component Uo: 0.030

BUILDING FILE REPORT

Johnson

Page 8

Above-Grade Wall: R-13

Information From Quick Fill Screen:

Standard Wood Frame

Continuous Insulation (R-Value)	0.0
Frame Cavity Insulation (R-Value)	13.0
Frame Cavity Insulation Thickness (in)	3.5
Frame Cavity Insulation Grade	1
Stud Size (w x d, in)	1.5 x 3.5
Stud Spacing (in o.c.)	16.0
Framing Factor - (default)	0.2300
Gypsum Thickness (in)	0.5

Note:

Layers	Paths	
	Cavity	Framing
Inside Air Film	0.680	0.680
Gyp board	0.450	0.450
Cavity ins/Frm	13.000	4.375
Continuous ins	0.000	0.000
Ext Finish	0.940	0.940
	0.000	0.000
	0.000	0.000
Outside Air Film	0.170	0.170
Total R-Value	15.240	6.615
U-Value	0.066	0.151
Relative Area	0.770	0.230
UA	0.051	0.035

Total Component UA: 0.085

Total Component Area: 1.0

Component Uo: 0.085

BUILDING FILE REPORT

Johnson

Page 9

Window Information:	1	2	3
Name	North	South	West
Library Type	Insulate	Insulate	Insulate
U-Value	0.280	0.280	0.280
SHGC	0.440	0.440	0.440
Area(sq ft)	15.00	8.00	112.00
Orientation	North	South	West
Overhang Depth	2.0	2.0	2.0
Overhang To Top	1.0	1.0	1.0
Overhang To Bottom	5.0	5.0	5.0
Interior Winter Shading	1.00	1.00	1.00
Interior Summer Shading	1.00	1.00	1.00
Adjacent Winter Shading	Most	None	None
Adjacent Summer Shading	Most	None	None
Wall Assignment	AGWall 1	AGWall 1	AGWall 1

Window Information:	4		
Name	East		
Library Type	Insulate		
U-Value	0.280		
SHGC	0.440		
Area(sq ft)	260.00		
Orientation	East		
Overhang Depth	2.0		
Overhang To Top	1.0		
Overhang To Bottom	5.0		
Interior Winter Shading	1.00		
Interior Summer Shading	1.00		
Adjacent Winter Shading	None		
Adjacent Summer Shading	None		
Wall Assignment	AGWall 1		

Window: Insulate

U-Value: 0.280
 Solar Heat Gain Coefficient: 0.440
 Note:

Door Information:	1	2	3
Name	Front	Side Entrance	Garage Entrance
Opaque Area(sq ft)	28.0	21.0	21.0
Library Type	R-5	R-5	R-5
Wall Assignment	AGWall 1	AGWall 1	AGWall 2
Uo Value	0.168	0.168	0.168

BUILDING FILE REPORT

Johnson

Page 10

Door: R-5

R-Value of Opaque Area: 5.0

Storm Door: No

Note:

Roof Information:	1	2	
Name			Main
Library Type	R-38, Vault, gr. II	R-50 Blown, Attic*	
Gross Area(sq ft)	473.00	2435.00	
Color	Medium	Medium	
Radiant Barrier	No	No	
Type(Attic)	Vaulted	Attic	
Uo Value	0.035	0.020	

BUILDING FILE REPORT

Johnson

Page 11

Ceiling: R-38, Vault, gr. II

Information From Quick Fill Screen:

Continuous Insulation (R-Value)	0.0
Cavity Insulation (R-Value)	38.0
Cavity Insulation Thickness (in)	12.5
Cavity Insulation Grade	2.0
Gypsum Thickness (in)	0.500
Bottom Chord/Rafter Size(w x h, in)	1.5 x 14.0
Bottom Chord/Rafter Spacing (in o.c.)	24.0
Framing Factor - (default)	0.1100
Ceiling Type	Vaulted

Note:

Layers	Paths		
	Framing	Cavity	Grade
Inside Air Film	0.610	0.610	0.610
Gyp board	0.450	0.450	0.450
Cavity Ins/Frm	15.625	38.000	0.000
Continuous ins	0.000	0.000	0.000
Plywood	0.930	0.930	0.930
Shingles	0.400	0.400	0.400
	0.000	0.000	0.000
Outside Air Film	0.170	0.170	0.170
Total R-Value	18.185	40.560	2.560
U-Value	0.055	0.025	0.391
Relative Area	0.110	0.870	0.020
UA	0.006	0.021	0.008

Total Component UA: 0.035

Total Component Area: 1.0

Component Uo: 0.035

BUILDING FILE REPORT

Johnson

Page 12

Ceiling: R-50 Blown, Attic*

Information From Quick Fill Screen:

Continuous Insulation (R-Value)	37.0
Cavity Insulation (R-Value)	13.0
Cavity Insulation Thickness (in)	3.5
Cavity Insulation Grade	1.0
Gypsum Thickness (in)	0.500
Bottom Chord/Rafter Size(w x h, in)	1.5 x 3.5
Bottom Chord/Rafter Spacing (in o.c.)	24.0
Framing Factor - (default)	0.1100
Ceiling Type	Attic

Note:

Layers	Paths	
	Framing	Cavity
Inside Air Film	0.610	0.610
Gyp board	0.450	0.450
Cavity Ins/Frm	4.375	13.000
Continuous ins	37.000	37.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
Outside Air Film	0.610	0.610
Total R-Value	43.045	51.670
U-Value	0.023	0.019
Relative Area	0.110	0.890
UA	0.003	0.017

Total Component UA: 0.020

Total Component Area: 1.0

Component Uo: 0.020

BUILDING FILE REPORT

Johnson

Page 13

Skylight Information:	1	2	
Name	Lite Tubes	Lite Tubes	
Library Type	Sola-Tube w/Air Kit	Sola-Tube w/Air Kit	
U-Value	0.200	0.200	
SHGC	0.280	0.280	
Area(sq ft)	2.0	2.0	
Winter Shading	None	None	
Summer Shading	None	None	
Orientation	Southwest	Northeast	
Pitch[°/12]	5	5	
Ceiling Assignment	Roof 2	Roof 1	

Window: Sola-Tube w/Air Kit

U-Value:	0.200
Solar Heat Gain Coefficient:	0.280
Note:	Sola-Tube w/ Air Tight Kit

Mechanical Equipment: General

Number of Mechanical Systems:	4
Heating SetPoint(F):	68.00
Heating Setback Thermostat:	Present
Cooling SetPoint(F):	78.00
Cooling Setup Thermostat:	Present

Heat: Fujitsu D-MiniHP AOU

SystemType:	Air-source heat pump
Fuel Type:	Electric
Rated Output Capacity (kBtuh):	37.2
Seasonal Equipment Efficiency:	9.0 HSPF
Desuperheater:	No
Note:	AOU36RML1
Location:	Conditioned area
Performance Adjustment:	100
Percent Load Served:	50
Number Of Units:	1

BUILDING FILE REPORT

Johnson

Page 14

Heat: Fujitsu D-MiniHP AOU

SystemType:	Air-source heat pump
Fuel Type:	Electric
Rated Output Capacity (kBtuh):	37.2
Seasonal Equipment Efficiency:	9.0 HSPF
Desuperheater:	No
Note:	AOU36RML1
Location:	Conditioned area
Performance Adjustment:	100
Percent Load Served:	50
Number Of Units:	1

Water Heating Equipment: 50 gal. 0.91EF Elec

Water Heater Type:	Conventional
Fuel Type:	Electric
Energy Factor:	0.91
Recovery Efficiency:	0.98
Water Tank Size (gallons):	50
Extra Tank Insulation (R-Value):	0.0
Note:	
Location:	Conditioned area
Percent Load Served:	50
Performance Adjustment:	100
Number Of Units:	1

Water Heating Equipment: 50 gal. 0.91EF Elec

Water Heater Type:	Conventional
Fuel Type:	Electric
Energy Factor:	0.91
Recovery Efficiency:	0.98
Water Tank Size (gallons):	50
Extra Tank Insulation (R-Value):	0.0
Note:	
Location:	Conditioned area
Percent Load Served:	50
Performance Adjustment:	100
Number Of Units:	1

Infiltration and Mechanical Ventilation

Whole House Infiltration

Measurement Type:	Blower door test
Heating Season Infiltration Value:	5.25 ACH @ 50 Pascals
Cooling Season Infiltration Value:	5.25 ACH @ 50 Pascals
2009 IECC Verification:	Tested

Mechanical Ventilation for IAQ

Type:	Balanced
Rate(cfm):	240
Sensible Recovery Efficiency(%):	0.00
Total Recovery Efficiency(%):	0.00
Hours per Day:	12.00
Fan Power (watts):	110.00

Ventilation Strategy for Cooling

Cooling Season Ventilation:	Natural Ventilation
-----------------------------	---------------------

Lights and Appliances

Simplified Audit	
Oven/Range Fuel Type:	Electric
Clothes Dryer Fuel Type:	Electric
Percent Fluorescent - Pin-Based:	0.00
Percent Fluorescent - CFL:	100.00
Refrigerator KWh:	571
Dishwasher EF:	1.30
Ceiling Fan CFM / Watt:	70.40

Property/Builder:

Owner's Name: Johnson
Property Address: 1144 Scenic View Heights
City,St,Zip: Oak Harbor, WA 98277
Phone No.:

Builder's Name: CVH
Model:
Development:
Phone No.: 360-678-7000

Rating Date: 3.15.10
Rating No.: 1

IMPORTANT NOTICE TO BUILDER

Builder affirms in this affidavit that all components listed in the Building File Report are accurate and incorporate Home. Builder agrees to permit home energy rating system (HERS) Provider and/or Rater, to randomly verify c for the benefit of the HERS Provider's and/or Rater's interest. The HERS Provider and Rater do not create or in obligations to Builder or any subsequent owner. Builder is responsible for making any inspections to protect Bu There is no GUARANTEE or WARRANTY, expressed or implied, from the HERS Provider or Rater as to this Ne

Builder's Signature: _____ Date: ____/____/____

HERS Index: 74

Rating Reason: Site Visit

Rater's Signature: _____

Date: ____/____/____

COMPONENT CONSUMPTION SUMMARY

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

Johnson

HEATING SEASON (MMBtu/yr)

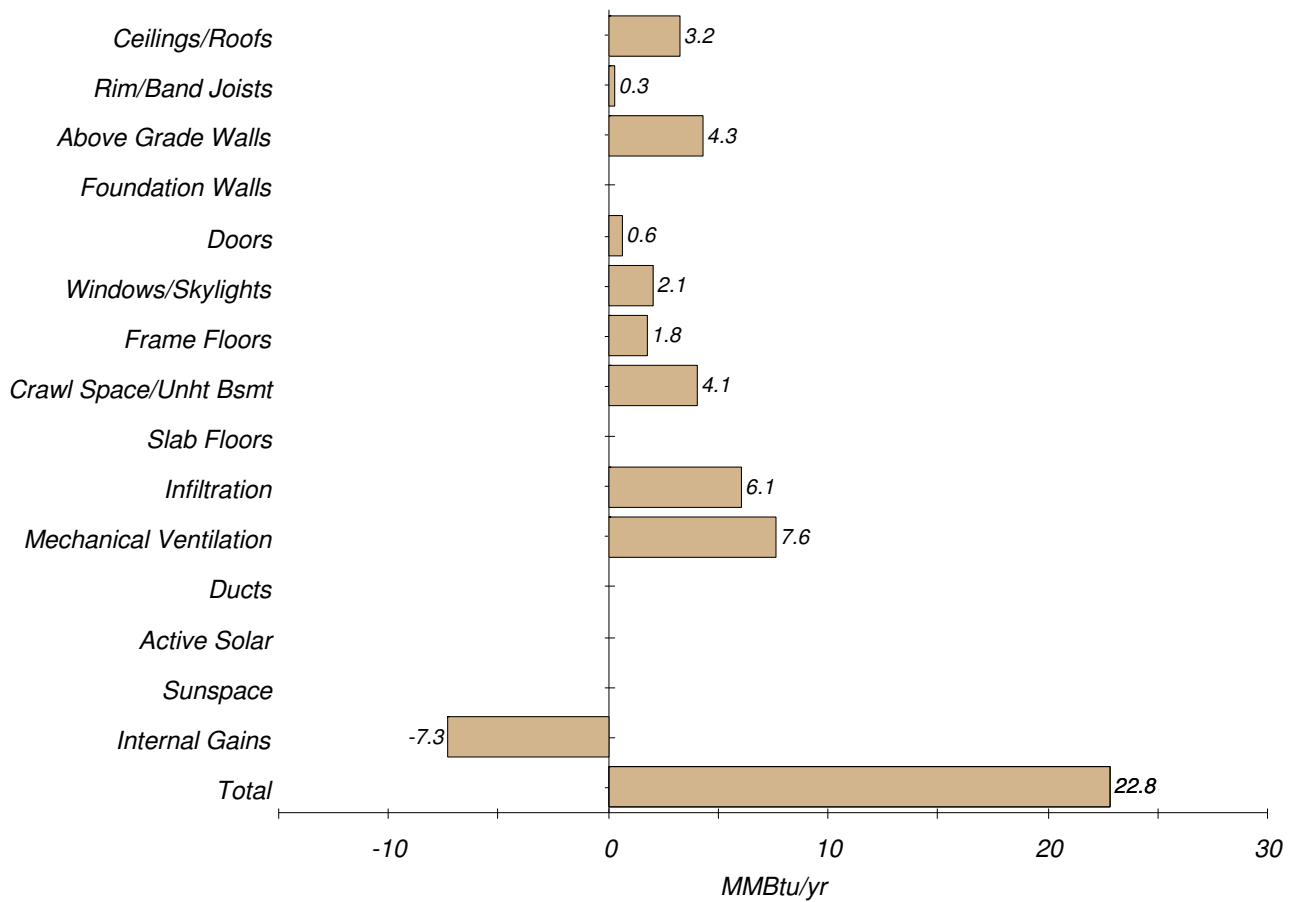
Ceilings/Roofs	3.2
Rim/Band Joists	0.3
Above Grade Walls	4.3
Foundation Walls	0.0
Doors	0.6
Windows/Skylights	2.1
Frame Floors	1.8
Crawl Space/Unht Bsmt	4.1
Slab Floors	0.0
Infiltration	6.1
Mechanical Ventilation	7.6
Ducts	0.0
Active Solar	0.0
Sunspace	0.0
Internal Gains	-7.3
Total	22.8

Johnson

COMPONENT CONSUMPTION SUMMARY

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

Heating Season



COMPONENT LOAD SUMMARY

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

Johnson

HEATING SEASON (MMBtu/yr)

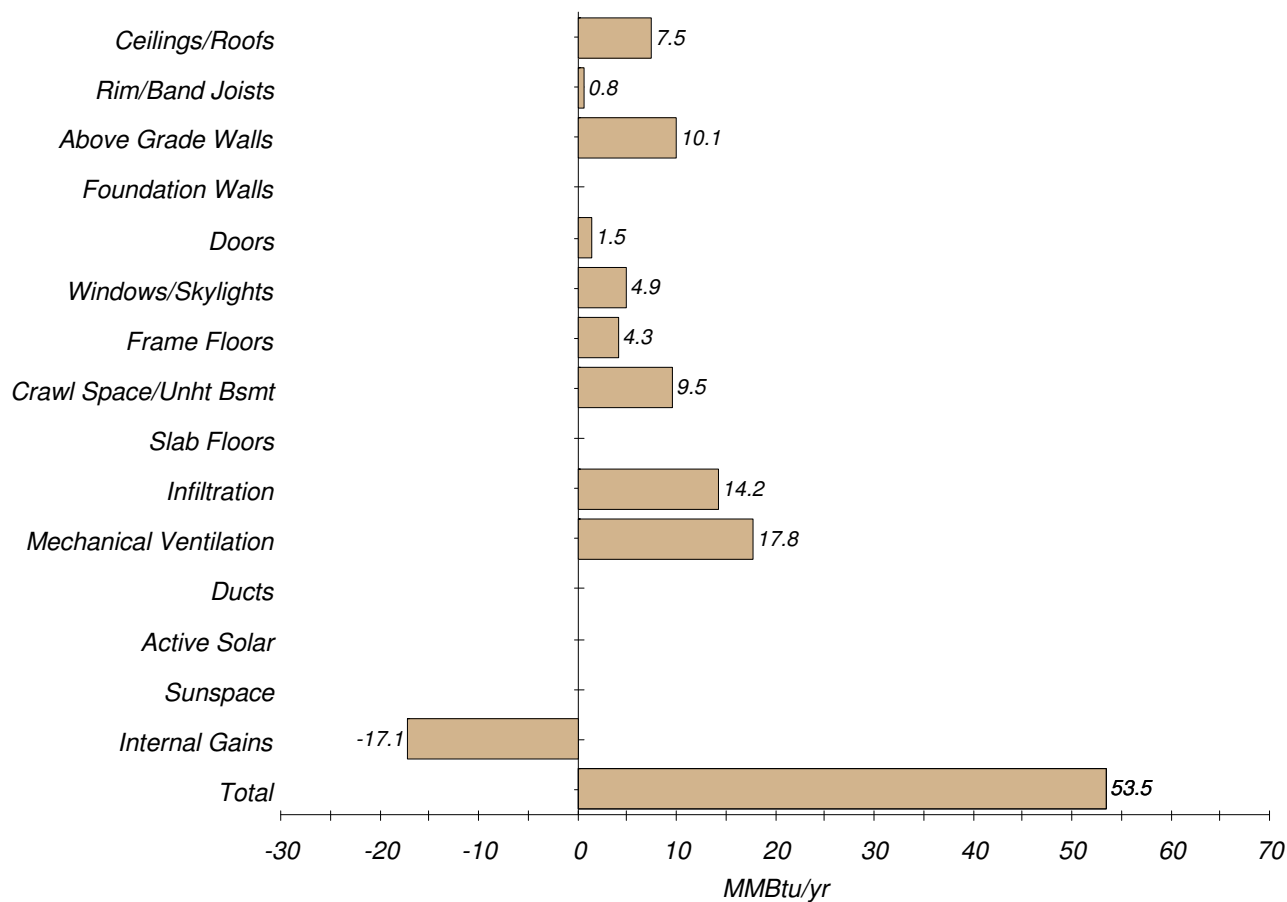
Ceilings/Roofs	7.5
Rim/Band Joists	0.8
Above Grade Walls	10.1
Foundation Walls	0.0
Doors	1.5
Windows/Skylights	4.9
Frame Floors	4.3
Crawl Space/Unht Bsmt	9.5
Slab Floors	0.0
Infiltration	14.2
Mechanical Ventilation	17.8
Ducts	0.0
Active Solar	0.0
Sunspace	0.0
Internal Gains	-17.1
Total	53.5

Johnson

COMPONENT LOAD SUMMARY

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

Heating Season



COMPONENT DESIGN LOAD SUMMARY

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

Johnson

HEATING (KBtu/Hr)

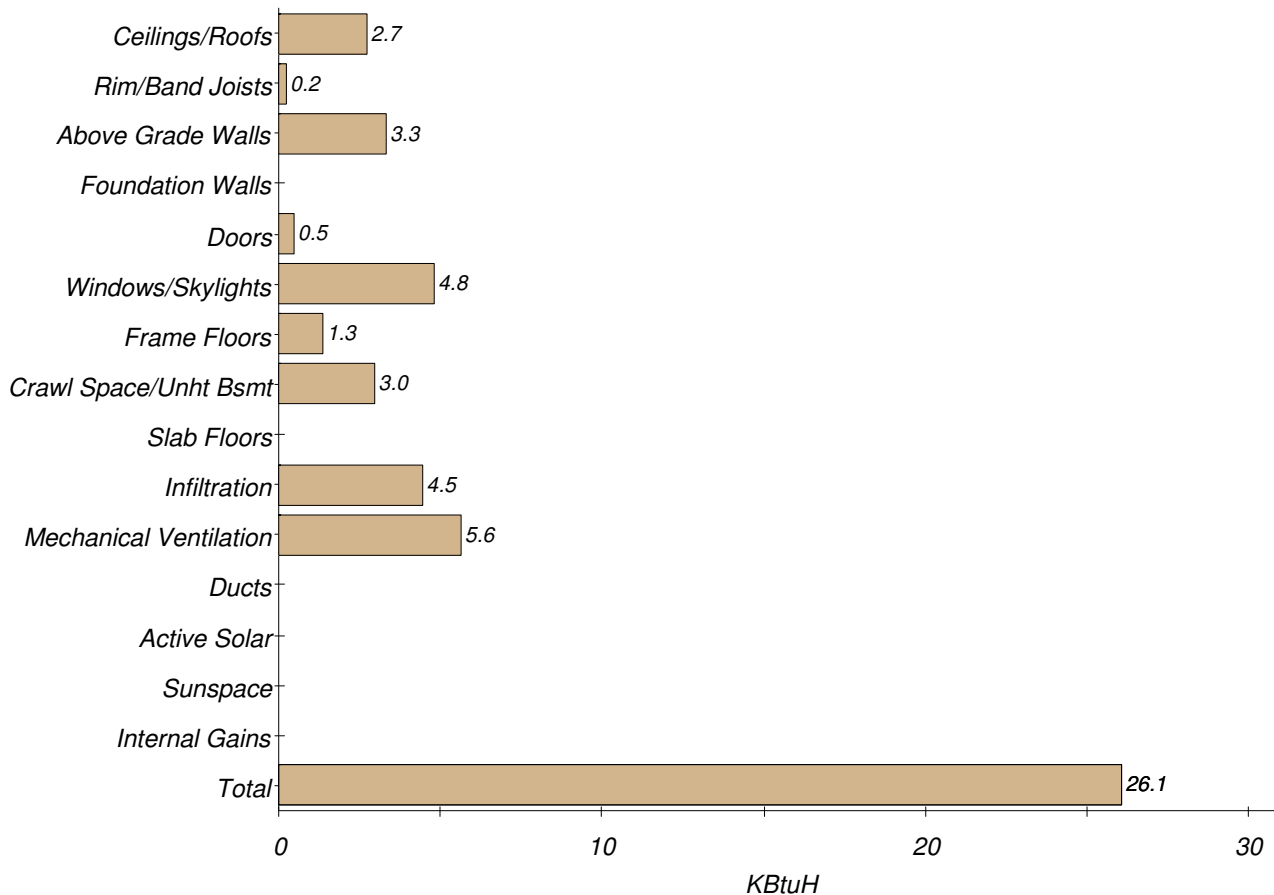
Ceilings/Roofs	2.7
Rim/Band Joists	0.2
Above Grade Walls	3.3
Foundation Walls	0.0
Doors	0.5
Windows/Skylights	4.8
Frame Floors	1.3
Crawl Space/Unht Bsmt	3.0
Slab Floors	0.0
Infiltration	4.5
Mechanical Ventilation	5.6
Ducts	0.0
Active Solar	0.0
Sunspace	0.0
Internal Gains	0.0
Total	26.1

Johnson

COMPONENT DESIGN LOAD SUMMARY

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

Heating



FUEL SUMMARY

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

Johnson

Annual Energy Cost (\$/yr)

Electric	\$	1619
----------	----	------

Annual End-Use Cost (\$/yr)

Heating	\$	577
Cooling	\$	0
Water Heating	\$	294
Lights & Appliances	\$	748
Photovoltaics	\$	-0
Service Charges	\$	69
Total	\$	1688

Annual End-Use Consumption

Heating (kWh)	6688
Water Heating (kWh)	3377
Lights & Appliances (kWh)	8602

Annual Energy Demands (kW)

Heating	8.8
Cooling	0.0
Water Heating (Winter Peak)	0.8
Water Heating (Summer Peak)	0.6
Lights & Appliances (Winter Peak)	0.8
Lights & Appliances (Summer Peak)	2.6
Total Winter Peak	10.4
Total Summer Peak	3.2

Utility Rates:

Electricity:	Electric 2010
--------------	---------------

ENERGY COST AND FEATURE REPORT

Date: March 29, 2010	Rating No.: 1
Building Name: Johnson	Rating Org.: Pinnacle Inspections
Owner's Name: Johnson	Phone No.: 360-920-4234
Property: 1144 Scenic View Heights	Rater's Name: Robert Stockmann
Address: Oak Harbor, WA 98277	Rater's No.: WAHERS004
Builder's Name: CVH	
Weather Site: Whidbey Island, WA	Rating Type: Site Visit
File Name: CVH-Johnson 5.25 ACH50.blg	Rating Date: 3.15.10

Johnson

ANNUAL ENERGY COSTS

Heating	\$	577
Cooling	\$	0
Water Heating	\$	294
Lights & Appliances	\$	748
Photovoltaics	\$	-0
Service Charges	\$	69
Total	\$	1688
Average Monthly	\$	141

ENERGY FEATURES

Ceiling w/Attic:	R-50 Blown, Attic* U=0.020
Vaulted Ceiling:	R-38, Vault, gr. II U=0.035
Above Grade Walls:	R-13 + 4" NB U=0.030
Foundation Walls (Cond):	None
Found. Walls (Uncond):	Uninsulated
Doors:	R-5 U=0.168
Windows:	Insulate U=0.280
Frame Floors:	R-30 Main Floor* U=0.037
Slab Floors:	None
Infiltration:	Htg: 5.25 Clg: 5.25 ACH50
Infilt. Measure:	Blower door test
Mechanical Ventilation:	Balanced: 240 cfm, 110.0 watts.
Interior Mass:	None
Mech Equip List:	Heating: Air-source heat pump, 37.2 kBtuh, 9.0 HS
	Heating: Air-source heat pump, 37.2 kBtuh, 9.0 HS
	Water Heating: Conventional, Elec, 0.91 EF.
	Water Heating: Conventional, Elec, 0.91 EF.

ENERGY COST AND FEATURE REPORT

Johnson

Page 2

Programmable Thermostat:	Heat=Yes; Cool=Yes
Ducts:	NA
Duct Leakage:	NA
Lights/Appliances:	Defaults
Active Solar:	None
Photovoltaics:	None
Sunspace:	No

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

EQUIPMENT SIZING SUMMARY

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

Johnson

HEATING

Calculated Peak Load (kBtu/hr)	26.1
Sizing Factor (%)	100.0

HEATING EQUIPMENT CAPACITY (kBtu/hr)

Required	26.1
Specified	74.4

COOLING

Calculated Peak Load (kBtu/hr)	0.0
Sensible	0.0
Latent	0.0
Sizing Factor (%)	0.0

COOLING EQUIPMENT CAPACITY (kBtu/hr)

Required Total	0.0
Specified Total	0.0

Required Sensible	0.00
Specified Sensible	0.00

Required Latent	0.00
Specified Latent	0.00

LIGHTS AND APPLIANCES SUMMARY

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

Johnson

Electric Consumption (kWh/yr)

Lighting	1157.8
Refrigerator	571.0
Freezer	0.0
Dishwasher	44.4
Oven/Range	547.5
Clothes Washer	60.0
Clothes Dryer	600.0
Mechanical Ventilation Fan	481.8
Ceiling Fan	207.6
Other	4931.5
Total	8601.6

Annual Energy Cost (\$/yr)

Lighting	\$	101
Refrigerator	\$	50
Freezer	\$	0
Dishwasher	\$	4
Oven/Range	\$	48
Clothes Washer	\$	5
Clothes Dryer	\$	52
Mechanical Ventilation Fan	\$	42
Ceiling Fan	\$	18
Other	\$	429
Total	\$	748

PERFORMANCE SUMMARY

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

Johnson

Annual Load (MMBtu/yr)

Heating	53.5
Cooling	0.0
Water Heating	11.3

Annual Consumption (MMBtu/yr)

Heating	22.8
Cooling	0.0
Water Heating	11.5
Lights & Appliances	29.4
Photovoltaics	-0.0
Total	63.7

Annual Energy Cost (\$/yr)

Heating	\$	577
Cooling	\$	0
Water Heating	\$	294
Lights & Appliances	\$	748
Photovoltaics	\$	-0
Service Charges	\$	69
Total	\$	1688

Design Loads (kBtu/hr)

Space Heating	26.1
Space Cooling	0.0

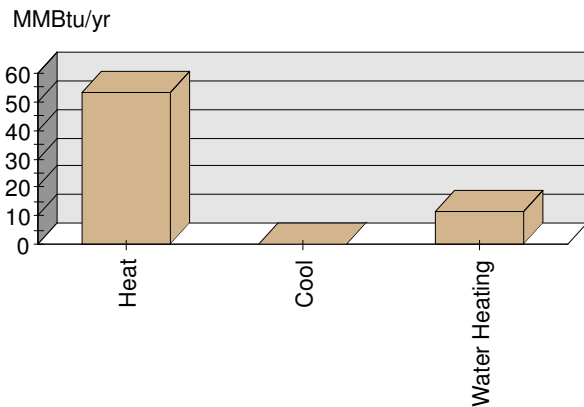
Utility Rates:

Electricity:	Electric 2010
--------------	---------------

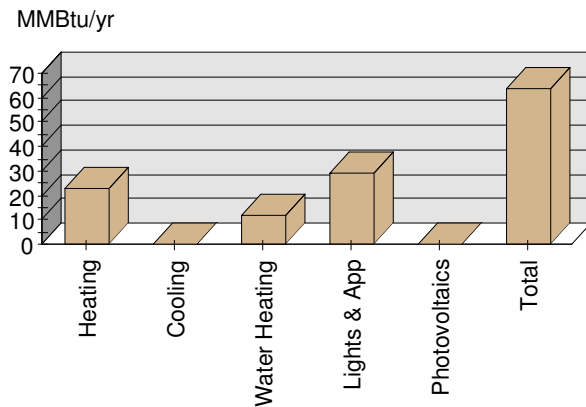
PERFORMANCE SUMMARY

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

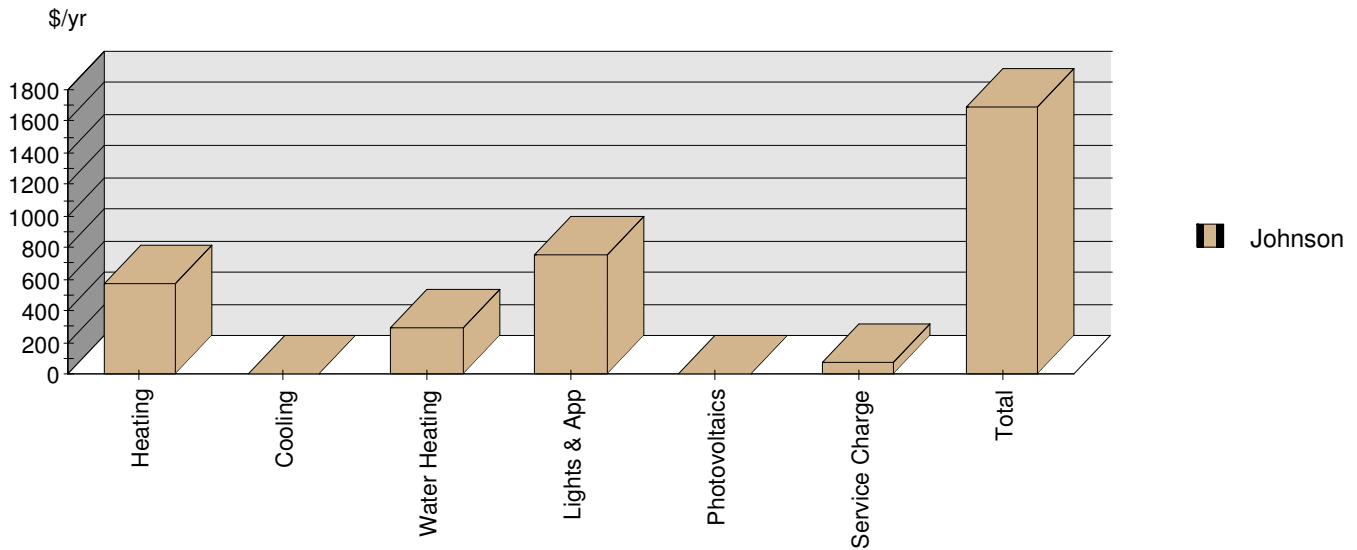
Annual Load



Annual Consumption



Annual Energy Cost

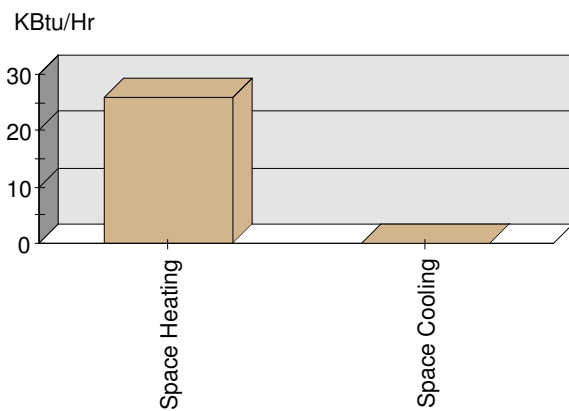


Design Loads

Utility Rates:

Electricity:

Electric 2010



PERFORMANCE FACTORS

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

Johnson

Normalized Loads (Btu/sf shell area/DD)

Heating:	1.18
Cooling:	0.00

Normalized Consumption (kBtu/sf floor area/yr)

Heating:	7.8
Cooling:	0.0
Water Heating:	4.0
Lighting:	1.4
Appliances:	8.7
Photovoltaics:	-0.0
Total w/o PV:	21.9
Total:	21.9

Normalized Consumption (Btu/sf floor area/DD)

Heating:	1.5
Cooling:	0.0

Normalized Costs (\$/sf floor area/yr)

Heating:	\$	0.198
Cooling:	\$	0.000
Water Heating:	\$	0.101
Lighting:	\$	0.035
Appliances	\$	0.223
Photovoltaics	\$	-0.000
Total:	\$	0.557

Normalized Design Loads (Btuh/sf shell area/DD)

Heating:	0.0006
Cooling:	0.0000

PERFORMANCE FACTORS

Johnson

Page 2

Normalization Factors

Floor Area:	2908
Shell Area:	8584
Heating Degree Days (B65):	5274
Cooling Degree Days (B74):	3

SOURCE ENERGY & EMISSIONS REPORT

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

Source Energy Consumption (MMBtu/year)

All Electric

	<i>Reference Home</i>	<i>As Designed</i>	<i>Difference</i>	<i>% Difference</i>
Heating:	40.5	30.2	-10.4	-25.6%
Cooling:	4.3	1.3	-3.0	-69.8%
Water heating:	16.1	15.0	-1.1	-6.8%
Lights & Appliances:	45.4	37.1	-8.3	-18.3%
Photovoltaics:	0.0	0.0		
Total:	106.2	83.5	-22.7	-21.4%

Total Emissions

All Electric

<i>Type of Emissions</i>	<i>Reference Home</i>	<i>As Designed</i>	<i>Difference</i>	<i>% Difference</i>
Carbon Dioxide (CO2) - tons/year	3.9	3.1	-0.8	-21.4%
Sulfur Dioxide (SO2) - lbs/year	2.2	1.7	-0.5	-21.4%
Nitrogen Oxides (NOx) - lbs/year	10.1	7.9	-2.2	-21.4%

Emissions By End-Use

(All Electric Reference Home versus As Designed)

	CO2-tons/yr		SO2-lbs/yr		NOx-lbs/yr	
	<i>Ref</i>	<i>Des</i>	<i>Ref</i>	<i>Des</i>	<i>Ref</i>	<i>Des</i>
Heating	1.5	1.1	0.8	0.6	3.8	2.9
Cooling	0.2	0.0	0.1	0.0	0.4	0.1
Water Heating	0.6	0.5	0.3	0.3	1.5	1.4
Lights & Appliances	1.7	1.4	0.9	0.8	4.3	3.5
Photovoltaics	0.0	0.0	0.0	0.0	0.0	0.0

The energy and emission values are calculated by comparing the Rated Home to an all-electric version of the Reference Home as defined in the "Mortgage Industry National Home Energy Rating Systems Standards" as promulgated by the Residential Energy Services Network (RESNET). Site-to-source multipliers and air emission data were taken from the US EPA eGRID2007 database.

EMISSIONS REPORT

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

Total Emissions

Johnson

Type of Emissions

Carbon Dioxide (CO ₂) - tons/year	3.0
Sulfur Dioxide (SO ₂) - lbs/year	1.7
Nitrogen Oxides (NO _x) - lbs/year	7.8

Emissions By End-Use

Johnson

Carbon Dioxide (CO₂) - tons/year

Heating	1.1
Cooling	0.0
Water Heating	0.5
Lights & Appliances	1.4
Photovoltaics	0.0

Sulfur Dioxide (SO₂) - lbs/year

Heating	0.6
Cooling	0.0
Water Heating	0.3
Lights & Appliances	0.8
Photovoltaics	0.0

Nitrogen Oxide (NO_x) - lbs/year

Heating	2.8
Cooling	0.0
Water Heating	1.4
Lights & Appliances	3.6
Photovoltaics	0.0

EMISSIONS REPORT

Johnson

Page 2

Site-to-source energy multipliers and air emission data were taken from the US EPA eGRID2007 database.

2005 EPACT ENERGY EFFICIENT HOME TAX CREDIT

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

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

	2004 IECC 50% Target	As Designed
Heating:	27.5	41.0
Cooling:	5.3	3.2
Total:	32.8	44.1

Envelope Loads (MMBtu/year)

	2004 IECC 90% Target	As Designed
Heating:	49.5	54.4
Cooling:	9.5	4.0
Total:	59.0	58.4

This home DOES NOT meet the requirements for the residential energy efficiency tax credits under Section 1332, Credit for Construction of New Energy Efficient Homes, of the Energy Policy Act of 2005.

Building Features

Ceiling Flat: R-50	Slab: None
Vaulted Ceiling: R-38	Duct: NA
Above Grade Walls: R-33, R-13	Window: U-Value = 0.280, SHGC = 0.440
Foundation Walls: R-0.0	Heating: Air-source heat pump, Electric, 9.0 HSPF.
Exposed Floor: R-30, R-20, R-25	Cooling: N/A

This report provides information useful in determining whether the home qualifies for Energy Efficiency Tax Credits. It is not valid for tax purposes, as homes must be inspected and approved by a certified HERS rater in order to qualify.

ENERGY CODE INSPECTION CHECKLIST

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

Building Information:

Conditioned Area (sq ft):	2908
Conditioned Volume (cubic ft):	25535
Insulated Shell Area (sq ft):	8584

The items below will be inspected for energy code certification. Any deviation from these specifications should be brought to the attention of Robert Stockmann, as soon as possible to assure that the project will still comply with energy code requirements.

Ceilings:

- [] 1. Vaulted: R-38, Vault, gr. II (473 s.f.)
R-0.0 continuous insulation, R-38.0 cavity insulation.
Name: Insulation Grade: I II III Face / Inset

Comments/Location _____
- [] 2. Attic: R-50 Blown, Attic* (2435 s.f.)
R-37.0 continuous insulation, R-13.0 cavity insulation.
Name: Main Insulation Grade: I II III Face / Inset

Comments/Location _____

Above-Grade Walls:

- [] 1. Wall: R-13 + 4" NB (2184 s.f.), Between conditioned space and ambient
R-20.0 continuous insulation, R-13.0 cavity insulation.
Name: R-13 + NB Insulation Grade: I II III Face / Inset

Comments/Location _____

ENERGY CODE INSPECTION CHECKLIST

Johnson

Page 2

- [] 2. Wall: R-13 (344 s.f.), Between conditioned space and garage
R-0.0 continuous insulation, R-13.0 cavity insulation.
Name: Insulation Grade: I II III Face / Inset

Comments/Location _____

Windows and Skylights:

Window-to-Wall Area Ratio: 0.16

- [] 1. Window: Insulate (15 s.f., North), U-Value: 0.280, SHGC: 0.440
For windows without labeled U-factors, describe features:
Name: North Orientation: North

Comments/Location _____

- [] 2. Window: Insulate (8 s.f., South), U-Value: 0.280, SHGC: 0.440
For windows without labeled U-factors, describe features:
Name: South Orientation: South

Comments/Location _____

- [] 3. Window: Insulate (112 s.f., West), U-Value: 0.280, SHGC: 0.440
For windows without labeled U-factors, describe features:
Name: West Orientation: West

Comments/Location _____

- [] 4. Window: Insulate (260 s.f., East), U-Value: 0.280, SHGC: 0.440
For windows without labeled U-factors, describe features:
Name: East Orientation: East

Comments/Location _____

- [] 5. Skylight: Sola-Tube w/Air Kit (2 s.f.), U-Value: 0.200, SHGC: 0.280
For skylights without labeled U-factors, describe features:
Name: Lite Tubes Orientation: Southwest

Comments/Location _____

- [] 6. Skylight: Sola-Tube w/Air Kit (2 s.f.), U-Value: 0.200, SHGC: 0.280
For skylights without labeled U-factors, describe features:

ENERGY CODE INSPECTION CHECKLIST

Johnson

Page 3

Name: Lite Tubes Orientation: Northeast

Comments/Location _____

Doors:

- [] 1. Door: R-5 (28 s.f.), R-Value 5.0

Comments/Location _____

- [] 2. Door: R-5 (21 s.f.), R-Value 5.0

Comments/Location _____

- [] 3. Door: R-5 (21 s.f.), R-Value 5.0

Comments/Location _____

Frame Floors:

- [] 1. Floor: R-30 Main Floor* (2158 s.f.), Between conditioned space and enclosed crawl space
R-0.0 continuous insulation, R-30.0 cavity insulation.

Name: Crawlspace Insulation Grade: I II III Face / Inset

Comments/Location _____

- [] 2. Floor: R-20 XPS Floor (256 s.f.), Between conditioned space and ambient conditions
R-20.0 continuous insulation, R-0.0 cavity insulation.

Name: Under Slab Insulation Grade: I II III Face / Inset

Comments/Location _____

- [] 3. Floor: R-25 (494 s.f.), Between conditioned space and ambient conditions
R-0.0 continuous insulation, R-25.0 cavity insulation.

Name: Additions Insulation Grade: I II III Face / Inset

Comments/Location _____

Foundation Walls:

- [] 1. Wall: Uninsulated0* (690 s.f.), Between enclosed crawl space and ambient/ground
R-0.0 interior continuous insulation, R-0.0 interior cavity insulation, R-0.0 exterior insulation.

Name: Insulation Grade: I II III Face / Inset

ENERGY CODE INSPECTION CHECKLIST

Johnson

Page 4

Comments/Location _____

Rim and Band Joists:

- [] 1. Joist: Band Joist (240 s.f.), Between conditioned space and ambient
R-20.0 continuous insulation, R-21.0 cavity insulation.
Name: Band Joist Insulation Grade: I II III Face / Inset

Comments/Location _____

Mechanical Equipment:

- [] 1. Heating: Air-source heat pump, Electric, 9.0 HSPF.

Make and Model Number: _____

- [] 2. Heating: Air-source heat pump, Electric, 9.0 HSPF.

Make and Model Number: _____

- [] 3. Water Heating: Conventional, Electric, 0.91 EF, 50.0 Gal.

Make and Model Number: _____

- [] 4. Water Heating: Conventional, Electric, 0.91 EF, 50.0 Gal.

Make and Model Number: _____

Mechanical Ventilation System:

- [] Mechanical ventilation system rated for, and capable of, providing continuous ventilation.
System shall include automatic timing controls.

System type: Balanced, 0.0% Sensible Efficiency, 0.0% Total Efficiency, 240 cfm, 12.0 hrs/day, 110.0 watts.

System description(make): _____

Air Leakage Control:

- [] Joints, seams, penetrations, and all other such openings in the building envelope that are sources of air leakage must be sealed.
- [] Recessed light fixtures must be type IC rated, air tight, and sealed to drywall; or, installed inside conditioned space.

Vapor Retarder:

- [] Required on the warm-in-winter side of all non-vented framed ceilings, walls, and floors.

ENERGY CODE INSPECTION CHECKLIST

Johnson

Page 5

Materials Identification:

- ☐ Materials and equipment must be identified so that compliance can be determined.
- ☐ Manufacturer manuals for all installed heating and cooling equipment and service water heating equipment must be provided.
- ☐ Insulation R-values and glazing U-factors must be clearly marked on the building plans or specifications.

Temperature Controls:

- ☐ Thermostats are required for each separate HVAC system. A manual or automatic means to partially restrict or shut off the heating and/or cooling input to each zone or floor shall be provided.
- ☐ Programmable Thermostat

Circulating Hot Water Systems:

- ☐ All circulating service hot water piping shall be insulated to at least R-2. Circulating hot water systems shall include an automatic or readily accessible manual switch that can turn off the hot water circulating pump when the system is not in use.

Heating and Cooling Piping Insulation:

- ☐ Mechanical system piping capable of carrying fluids above 105F or below 55F shall be insulated to a minimum of R-3.

NOTES

2006 IECC OVERALL BUILDING UA COMPLIANCE

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

Elements	Insulation Levels	
	2006 IECC	As Designed
Shell UA Check		
Ceilings:	87.1	64.8
Skylights:	2.4	0.8
Above-Grade Walls:	138.2	86.1
Windows and Doors:	162.8	122.4
Floors Over Ambient:	24.8	30.9
Floors Over Uncond Crawl Space:	71.2	80.1
Overall UA (Design must be lower):	486.4	385.1
Window U-Factor Check (per Section 402.6)		
Window U-Factor (Design must be lower):	0.480	0.280
Skylight U-Factor Check (per Section 402.6)		
Skylight U-Factor (Design must be lower):	0.750	0.200

This home MEETS the overall thermal performance requirements of the International Energy Conservation Code based on a climate zone of International Energy Conservation Code, 2006 edition.) In fact, this home surpasses the requirements by 20.8%.

Building Elements	Type	U-Value	Area
Ceilings			
Roof	R-38, Vault, gr. II	0.035	471.0
Roof	R-50 Blown, Attic*	0.020	2433.0
Skylights			
Skylight	Sola-Tube w/Air Kit	0.200	2.0
Skylight	Sola-Tube w/Air Kit	0.200	2.0
Above-Grade Walls			

Building Elements	Type	U-Value	Area
Wall	R-13 + 4" NB	0.030	1740.0
Wall	R-13	0.085	323.0
Joist	Band Joist	0.023	240.0
Windows and Doors			
Window	Insulate	0.280	15.0
Window	Insulate	0.280	8.0
Window	Insulate	0.280	112.0
Window	Insulate	0.280	260.0
Door	R-5	0.168	28.0
Door	R-5	0.168	21.0
Door	R-5	0.168	21.0
Floors Over Ambient			
Floor	R-20 XPS Floor	0.043	256.0
Floor	R-25	0.040	494.0
Floors Over Uncond. Crawl Space			
Floor	R-30 Main Floor*	0.037	2158.0

2006 IECC ANNUAL ENERGY COST COMPLIANCE

Date:	March 29, 2010	Rating No.:	1
Building Name:	Johnson	Rating Org.:	Pinnacle Inspections
Owner's Name:	Johnson	Phone No.:	360-920-4234
Property:	1144 Scenic View Heights	Rater's Name:	Robert Stockmann
Address:	Oak Harbor, WA 98277	Rater's No.:	WAHERS004
Builder's Name:	CVH		
Weather Site:	Whidbey Island, WA	Rating Type:	Site Visit
File Name:	CVH-Johnson 5.25 ACH50.blg	Rating Date:	3.15.10

Annual Energy Cost

	2006 IECC	As Designed
Heating:	745	598
Cooling:	42	27
Water Heating:	300	293
Lights & Appliances:	722	727
Photovoltaics:	-0	-0
Service Charge:	69	69
 Total:	 1878	 1714 *
 Window U-Factor Check (per Section 402.6)		
Window U-Factor (Design must be lower):	0.480	0.280
 Skylight U-Factor Check (per Section 402.6)		
Skylight U-Factor (Design must be lower):	0.750	0.200

This home MEETS the annual energy cost requirements in accordance with Section 404 of the 2006 International Energy Conservation Code based on a climate zone of 4C. In fact, this home surpasses the requirements by 8.7%.

Name: Robert Stockmann	Signature: _____
Organization: Pinnacle Inspections	Date: March 29, 2010

* Design energy cost is based on the following systems:
 Heating: Air-source heat pump, 37.2 kBtuh, 9.0 HSPF.
 Heating: Air-source heat pump, 37.2 kBtuh, 9.0 HSPF.
 Water Heating: Conventional, Elec, 0.91 EF.
 Water Heating: Conventional, Elec, 0.91 EF.
 Cooling: Air conditioner, 10.2 kBtuh, 13.0 SEER.
 Window-to-Floor Area Ratio: 0.14

Blower door test: Htg: 5.25 Clg: 5.25 ACH50

In accordance with IECC, building inputs, such as setpoints, infiltration rates, and window shading may have been changed prior to calculating annual energy cost. Furthermore, the standard reference design HVAC system efficiencies are set to the "prevailing federal minimum standards" as of January, 2009. These standards are subject to change, and software updates should be obtained periodically to ensure the compliance calculations reflect current federal minimum standards.

Home Energy Rating Certificate

Johnson
1144 Scenic View Heights
Oak Harbor, WA 98277



**5 Stars
Site Visit**

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
500-401	400-301	300-251	250-201	200-151	150-101	100-91	90-86	85-71	70 or Less

HERS Index: 74

Efficient Home Comparison: 26% Better

General Information

Conditioned Area: 2908 sq. ft.
Conditioned Volume: 25535 cubic ft.
Bedrooms: 2

House Type: Single-family detached
Foundation: Enclosed crawl space

Mechanical Systems Features

Heating: Air-source heat pump, Electric, 9.0 HSPF.
Heating: Air-source heat pump, Electric, 9.0 HSPF.
Water Heating: Conventional, Electric, 0.91 EF, 50.0 Gal.
Duct Leakage to Outside: NA
Ventilation System: Balanced: 240 cfm, 110.0 watts.
Programmable Thermostat: Heating: Yes Cooling: Yes

Building Shell Features

Ceiling Flat: R-50 Exposed Floor: R-30, R-20, R-25
Vaulted Ceiling: R-38 Window Type: Insulate
Above Grade Walls: R-33, R-13 Infiltration:
Foundation Walls: R-0.0 Rate: Htg: 5.25 Clg: 5.25 ACH50
Slab: None Method: Blower door test

Lights and Appliance Features

Percent Fluorescent Pin-Based: 0.00 Clothes Dryer Fuel: Electric
Percent Fluorescent CFL: 100.00 Range/Oven Fuel: Electric
Refrigerator (kWh/yr): 571.00 Ceiling Fan (cfm/Watt): 70.40
Dishwasher Energy Factor: 1.30

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

REM/Rate - Residential Energy Analysis and Rating Software v12.82

This information does not constitute any warranty of energy cost or savings.
© 1985-2010 Architectural Energy Corporation, Boulder, Colorado.

Rating Number: 1

Certified Energy Rater: Robert Stockmann

Rating Date: 3.15.10

Rating Ordered For: Johnson

Estimated Annual Energy Cost

Use	MMBtu	Cost	Percent
Heating	23.2	\$587	35%
Cooling	0	\$0	0%
Hot Water	11.5	\$294	18%
Lights/Appliances	28.5	\$727	43%
Photovoltaics	-0.0	\$-0	-0%
Service Charges		\$69	4%
Total		\$1676	100%

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

EPA ENERGY STAR Home
ASHRAE Standard 90.2 - 1992
2003 International Energy Conservation Code
2004 International Energy Conservation Code
2006 International Energy Conservation Code

Robert Stockmann

Pinnacle Inspections

370 N East Camano Drive, Suite 5208

Camano Island, WA 98282

Phone #: (360) 920-4234

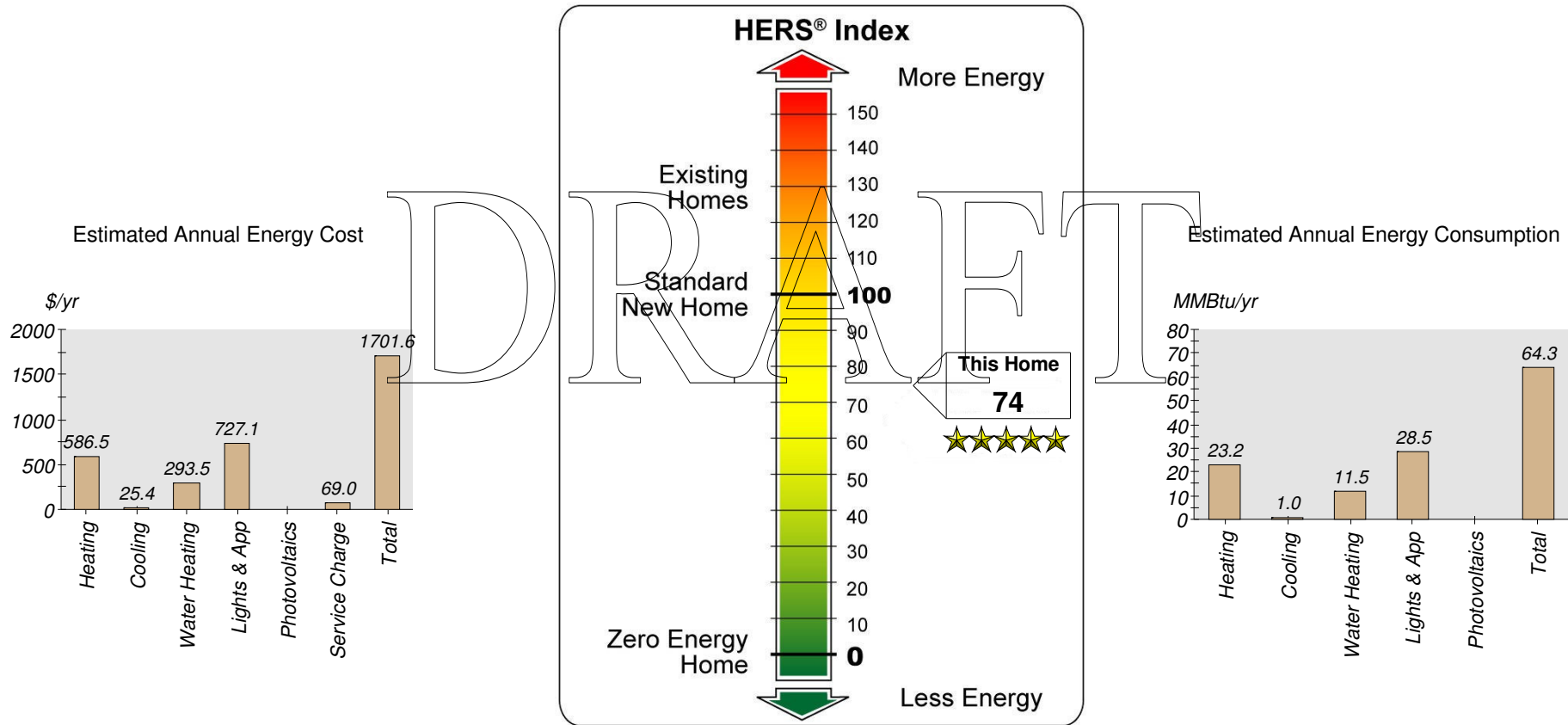
Fax #: (360) 387-9836

E: robert@pinnacleinspection.com

Certified Energy Rater

HOME PERFORMANCE WITH ENERGY STAR ENERGY RATING CERTIFICATE

PINNACLE INSPECTIONS



Address: 1144 Scenic View Heights
Oak Harbor, WA 98277

House Type: Single-family detached
Cond. Area: 2908 sq. ft.
Rating No.: 1
Issue Date: March 29, 2010

Annual Estimates*:
Electric(kWh): 18826
CO2 emissions(Tons): 3

**Based on standard operating conditions*

This home meets ENERGY STAR

Robert Stockmann
Pinnacle Inspections
370 N East Camano Drive, Suite 5208

Certified Rater: Robert Stockmann
Certification No: WAHERS004
Rating Date: 3.15.10

Signature: _____

REM/Rate - Residential Energy Analysis and Rating Software v12.82

This information does not constitute any warranty of energy cost or savings. © 1985-2010 Architectural Energy Corporation, Boulder, Colorado.
The Home Energy Rating Standard Disclosure for this home is available from the rating provider.

EnergySmart Home Scale QUALIFICATION FORM: PERFORMANCE PATH

Third-Party Verifiers should complete form and submit to:

MAIL: Builders Challenge, 3760 Tanglewood Lane, Davidsonville, MD 21035

EMAIL: builderschallenge@newportpartnersllc.com

FAX: 301-889-0019

ENERGY PERFORMANCE	
HouseType Single-family detached	Building Plan Number
Year built 2009 (Homes completed in 2007 or later may qualify if they meet the energy threshold and a third-party verifier can verify the Quality Criteria)	Square footage of conditioned space 2908.0
	Number of Bedrooms 2
Site address (if not available, list the site Lot#) 1144 Scenic View Heights Oak Harbor WA 98277	E-Scale Mailing Address (where E-Scale will be mailed) Attn: Robert Stockmann 370 N East Camano Drive #5208 Camano Island, WA 98282 360-920-4234
Registered Builder CVH 360-678-7000 ted@zero-energyplans.com	Developer (if known)
Third Party Verifier Pinnacle Inspections Robert Stockmann 360-920-4234 robert@pinnacleinspection.com www.pinnacleinspection.com	E-Scale Score/ HERS Index (70-0) Score is not in range (70-0)
	Date of Rating 3.15.10
	Identification number WAHERS004
	Rating software (name and version used) REM/Rate - v12.82
	Estimated annual energy costs(\$) 1702 Do you want this on the E-Scale? Yes No
	Estimated average monthly energy cost (\$) 142 Do you want this on the E-Scale? Yes No
Estimated annual energy use 18826 kWh (Electric)	Estimated annual energy savings (relative to reference home) 5121 kWh (Electric)
Energy cost rates 0.09 \$/kWh	Estimated emissions reductions (relative to reference home) 0.8 tons of Carbon Dioxide (CO2) 0.5 lbs of Sulfur Dioxide (SO2) 2.2 lbs of Nitrogen Oxides (NOx)

QUALITY CRITERIA CHECKLIST

- ☐ As the Third-Party verifier for this house, I certify that the house complies with all the 'Required' Builders Challenge Quality Criteria, as defined by the Builders Challenge Quality Criteria Checklist

ADDITIONAL INFORMATION

House will be certified under these programs (check all that apply):

- ☐ ENERGY STAR
- ☐ Environments for Living
- ☐ LEED for Homes
- ☐ National Green Building Standard

SUMMARY OF SELECTED REPORTS

File Name: CVH-Johnson 5.25 ACH50.blg

Date: March 29, 2010

ENERGY ANALYSIS

Action Report

Ranks the building elements with the largest energy consumption on a component basis.

Air Leakage Report

Displays infiltration in all available units (regardless of the user input). Displays duct leakage in all available units if other than the quality displays the building ventilation information.

Building File Report

Echoes the building inputs. Use for verification or documentation.

Builder Affidavit

Builder affirmation of construction characteristics, coupled with HERS Provider/Rater disclaimer.

Component Consumption Summary

Presents the heating and cooling energy consumption of the building on a component basis.

Component Load Summary

Presents the heating and cooling load of the building on a component basis.

Component Design Load Summary

Presents the heating and cooling design load (or sizing load) of the building on a component basis, in kBtuh.

Fuel Summary

Summarizes the end-use energy consumption by fuel type.

Energy Cost And Feature Report

Summarizes the annual heating, cooling, water heating and lights and appliance costs and the major energy design features of the home.

Equipment Sizing Summary

Provides information about sizing heating and cooling equipment to meet the peak loads and the minimum Sensible Heat Fraction (SHF).

Lights And Appliances Summary

Summarizes the annual lights and appliance costs of the home.

Performance Summary

Summarizes the annual loads, energy consumption, and energy costs for heating, cooling, water heating, and lights and appliances.

Performance Factors

Shows area normalized and climate normalized consumption.

Source Energy & Emissions Report

Summarizes the Carbon Dioxide (CO₂), Sulfur Dioxide (SO₂), and Nitrous Oxides (NO_x) emissions from the source (power plant) based on the home and the location. The emission data for all 50 states were obtained from the American Gas Association.

Emissions Report

Summarizes the absolute values for Carbon Dioxide (CO₂), Sulfur Dioxide (SO₂), and Nitrous Oxides (NO_x) emissions produced by the home. Use the 2-building report option to display a meaningful comparison between two buildings.

2005 EPAct Tax Credit

The report indicates whether the home qualifies for tax credits under Section 1332, Credit for Construction of New Energy Efficient Homes Act of 2005.

CODE COMPLIANCE

Energy Code Inspection Checklist

A report, in checklist format, for use in the field by code officials and others responsible for checking the energy code-related performance of a building.

IECC Uo Compliance Report

The Uo compliance compares the overall U-value of the building to the overall U-value for an identical home insulated to meet the minimum requirements of IECC. The required component U-values are based on the number of heating degree-days for the building site.

IECC Consumption Compliance Report

The report compares the total annual energy use for the building design to a prescriptive version of the same building. This type of comparison provides flexibility in complying with IECC. The impacts of high efficiency heating and cooling systems, reduced infiltration and other performance improvements for compliance.

RATING

Home Energy Rating Certificate (HERC)

Provides a home energy rating index and annual energy cost estimate in accordance with the "Mortgage Industry National Home Energy Rating Standards" as promulgated by the Residential Energy Services Network (RESNET).

HERC - Performance Home

Provides a home energy rating index and performance on an existing home in accordance with the "Mortgage Industry National Home Energy Rating Standards" as promulgated by the Residential Energy Services Network (RESNET).

Builder's Challenge

The U.S. Department of Energy (DOE) has posed a challenge to the homebuilding industry - to build 220,000 high performance homes by 2015 called the Builders Challenge. This report can be used to submit a home to qualify for the challenge.

Johnson Residence Renovation
Clifton View Homes & Premier SIPS

Comments for the a news release:

Almost any existing home can benefit from this technology. The techniques we pioneered here can be completed almost entirely from the outside of the house, much like changing windows, but with much more dramatic results. Depending on the configuration of the home and roof, the Insul-Lam can deliver similar results there as well.