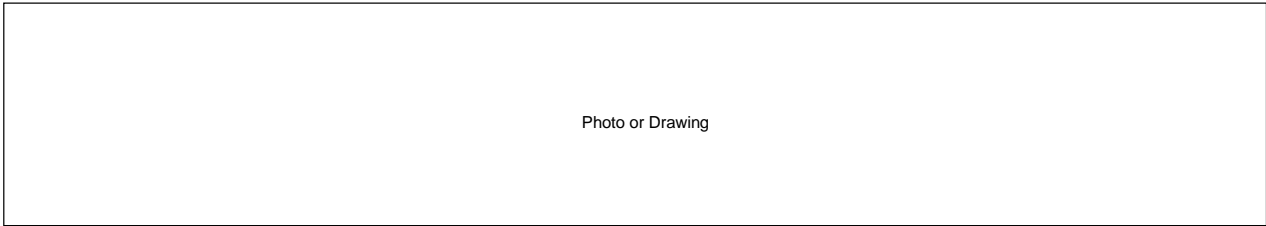


Passive House Verification



Building:	Wood Residence Remodel - Main House		
Location and Climate:	Sonoma, CA, Mediterranean	NAPA CO. AIRPORT CA*	
Street:	20009 7th Street East		
Postcode/City:	Sonoma, CA 95476		
Country:	USA		
Building Type:	Single Family Residence w/ detached guest house		
Home Owner(s) / Client(s):			
Street:			
Postcode/City:			
Architect:	Jarrod Denton, JD Architect		
Street:	1104 Adams Street, Suite 203B		
Postcode/City:	St. Helena, CA 94574 707-260-5542		
Mechanical System:			
Street:			
Postcode/City:			
Year of Construction:	2011		
Number of Dwelling Units:	1	Interior Temperature:	20.0 °C
Enclosed Volume V_e :	1644.4 m ³	Internal Heat Gains:	2.1 W/m ²
Number of Occupants:	4.0		

Specific Demands with Reference to the Treated Floor Area				
Treated Floor Area: 292.9 m ²				
	Applied:	Monthly Method	PH Certificate:	Fulfilled?
Specific Space Heat Demand:	14	kWh/(m²a)	15 kWh/(m²a)	Yes
Pressurization Test Result:	0.3	h⁻¹	0.6 h ⁻¹	Yes
Specific Primary Energy Demand (DHW, Heating, Cooling, Auxiliary and Household Electricity):	67	kWh/(m²a)	120 kWh/(m ² a)	Yes
Specific Primary Energy Demand (DHW, Heating and Auxiliary Electricity):	36	kWh/(m ² a)		
Specific Primary Energy Demand Energy Conservation by Solar Electricity:	82	kWh/(m ² a)		
Heating Load:	10	W/m ²		
Frequency of Overheating:		%	over 25 °C	
Specific Useful Cooling Energy Demand:	4	kWh/(m ² a)	15 kWh/(m ² a)	Yes
Cooling Load:	7	W/m ²		

We confirm that the values given herein have been determined following the PHPP methodology and based on the characteristic values of the building. The calculations with PHPP are attached to this application.

Issued on:

signed:

Passive House Verification

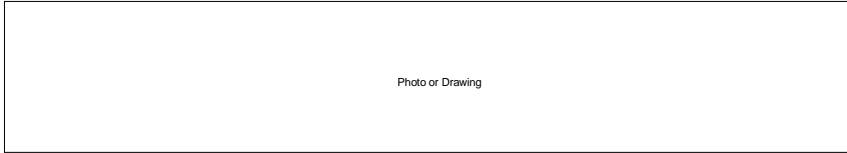


Photo or Drawing

Building: **Wood Residence Guest House**
 Location and Climate: **Sonoma, CA, Mediterranean** | **NAPA CO. AIRPORT CA**
 Street: **20009 7th Street East**
 Postcode/City: **Sonoma, CA 95476**
 Country: **USA**
 Building Type: **Single Family Residence w/ detached guest house**
 Home Owner(s) / Client(s): **James & Jennifer Jandak-Wood**
 Street: _____
 Postcode/City: _____
 Architect: **Jarrod Denton, JD Architect**
 Street: **1104 Adams Street, Suite 203B**
 Postcode/City: **St. Helena, CA 94574 707-260-5542**
 Mechanical System: _____
 Street: _____
 Postcode/City: _____
 Year of Construction: **2011**
 Number of Dwelling Units: **1**
 Enclosed Volume V_e : **310.4** m³
 Number of Occupants: **1.5**
 Interior Temperature: **20.0** °C
 Internal Heat Gains: **2.1** W/m²

No Standard Climate

Calculation Electricity / Internal Heat Gains

Building Type:

Internal Heat Gains

Utilisation Pattern:

Type of Values Used:

Planned Number of Occupants:

1 Verification

Verification: Monthly Method

Specific Space Heat Demand, Annual Method	17.4
Specific Space Heat Demand, Monthly Method	15.3

Specific Demands with Reference to the Treated Floor Area				
Treated Floor Area:	Applied:		PH Certificate:	Fulfilled?
52.2 m ²	Monthly Method			
Specific Space Heat Demand:	15 kWh/(m²a)		15 kWh/(m²a)	Yes
Pressurization Test Result:	0.4 h⁻¹		0.6 h ⁻¹	Yes
Specific Primary Energy Demand (DHW, Heating, Cooling, Auxiliary and Household Electricity):	77 kWh/(m²a)		120 kWh/(m ² a)	Yes
Specific Primary Energy Demand (DHW, Heating and Auxiliary Electricity):	61 kWh/(m²a)			
Specific Primary Energy Demand Energy Conservation by Solar Electricity:	kWh/(m²a)			
Heating Load:	11 W/m²			
Frequency of Overheating:	%	over	25 °C	
Specific Useful Cooling Energy Demand:	4 kWh/(m²a)		15 kWh/(m ² a)	Yes
Cooling Load:	6 W/m²			

We confirm that the values given herein have been determined following the PHPP methodology and based on the characteristic values of the building. The calculations with PHPP are attached to this application.

Issued on: _____
signed: _____