

Passive House Verification

Photo or Drawing

Architecture: MAD Architecture

Street: 12 Western Ave., #2

Postcode/City: 94952 Petaluma

Province/Country: CA US-United States of America

Energy consultancy: Essential Habitat Architecture

Street: 249 Sir Francis Drake Blvd

Postcode/City: 94960 San Anselmo

Province/Country: CA US-United States of America

Year of construction: 2024

No. of dwelling units: 1

No. of occupants: 3.1

Building: Nichols Residence Retrofit

Street: 5940 Orchard Station Rd

Postcode/City: 95472 Sebastopol

Province/Country: CA US-United States of America

Building type: SF Residence

Climate data set: US0107a-Santa Rosa

Climate zone: 5: Warm

Altitude of location: 65 m

Home owner / Client: Kristin & Jason Nichols

Street: 5940 Orchard Station Rd

Postcode/City: 95472 Sebastopol

Province/Country: CA US-United States of America

Mechanical system:

Street:

Postcode/City:

Province/Country:

Certification: Home Energy Services

Street: 1609 8th Street

Postcode/City: 94710 Berkeley

Province/Country: CA USA

Interior temperature winter [°C]: 20.0

Interior temp. summer [°C]: 25.0

Internal heat gains (IHG) heating case [W/m²]: 2.3

IHG cooling case [W/m²]: 2.3

Specific capacity [Wh/K per m² TFA]: 60

Mechanical cooling: x

Specific building characteristics with reference to the treated floor area				The PHPP has not been filled completely; it is not valid as verification		
		Treated floor area m²		Alternative		Fullfilled? ²
Space heating	Heating demand kWh/(m²a)	211.9		Criteria	criteria	
	Heating load W/m²	12	≤	15	-	yes
		11	≤	-	10	
Space cooling	Cooling & dehum. demand kWh/(m²a)	3	≤	15	15	yes
	Cooling load W/m²	7	≤	-	10	
	Frequency of overheating (> 25 °C) %	-	≤	-		-
		Frequency excessively high humidity (> 12 g/kg) %	0	≤	10	yes
Airtightness	Pressurization test result n ₅₀ 1/h	0.6	≤	0.6		yes
Non-renewable Primary Energy (PE)	PE demand kWh/(m²a)	39	≤	-		-
Primary Energy Renewable (PER)	PER demand kWh/(m²a)	18	≤	30	18	yes
	Generation of renewable energy kWh/(m²a)	107	≥	120	104	

² Empty field: Data missing; '-': No requirement

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

Task:

First name:

Surname:

Signature:

Issued on:

City:

Passive House Premium? yes