PHI Low Energy Building Verification

Building: The Catskill Project Model Home
Street: 8 Manor Falls Drive
Postcode/City: 12758 Livingston Manor
Province/Country: NY US-United States of America
Building type: Single family residence
Climate data set: US0090a-South Fallsburg
Climate zone: 3: Cool-temperate | Altitude of location: 1500 ft

Home owner / Client: Manor Falls Associates
Street: 245 W/ 29th Street, Suite 1203
Postcode/City: 10001 New York
Province/Country: NY US-United States of America

Architecture: Buck Moorhead Architect
Street: 245 W 29th St #1203
Postcode/City: 10001 New York
Province/Country: NY US-United States of America

Energy consultancy: Buck Moorhead Architect
Street: 245 W 29th St #1203
Postcode/City: =F19 New York
Province/Country: NY US-United States of America

Mechanical engineer: Cramer Silkworth / Baukraft Engineering
Street:
Postcode/City: 12508 Beacon
Province/Country: NY US-United States of America

Certification:
Street:
Postcode/City:
Province/Country:

Calculation electricity / Internal heat gains
Building type: 1-Residential building

Internal heat gains
Utilisation pattern: 10-Dwelling
Values: 2-Standard

Occupancy
5 1-Standard (only for residential buildings)

Year of construction: 2020
No. of dwelling units: 1
No. of occupants: 3.0
Interior temperature winter [°F]: 68.0
Internal heat gains (IHG) heating case [BTU/(hr.ft²)]: 0.77
Specific capacity [BTU/F per ft² TFA]: 10.6
Interior temp. summer [°F]: 77.0
IHG cooling case [BTU/(hr.ft²)]: 0.77
Mechanical cooling: x

Specific building characteristics with reference to the treated floor area

				Criteria	Alternative criteria	Fullfilled?[2]
	Treated floor area ft²	1713				
Space heating	Heating demand kBTU/(ft²yr)	9.12	≤	9.51	-	**yes**
	Heating load BTU/(hr.ft²)	5.61	≤	-	-	
Space cooling	Cooling & dehum. demand kBTU/(ft²yr)	6.42	≤	9.51	-	**yes**
	Cooling load BTU/(hr.ft²)	5.41	≤	-	-	
	Frequency of overheating (> 77 °F) %	-	≤	-		**-**
	Frequency of excessively high humidity (> 0.012 lb/lb) %	0.0	≤	10		**yes**
Airtightness	Pressurization test result n₅₀ 1/hr	0.6	≤	1.0		**yes**
Non-renewable Primary Energy (PE)	PE demand kBTU/(ft²yr)	43.68	≤	-		**-**
Primary Energy Renewable (PER)	PER demand kBTU/(ft²yr)	21.54	≤	24	24	**yes**
	Generation of renewable energy (in relation to pro-jected building footprint area) kBTU/(ft²yr)	13.40	≥	-	-	

n_{50} Pressurization test result

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

1-PE-factors (non-renewable) PHI Certification

(Selected primary energy factors for calculation of PE demand)

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:
Issued on:		City:

PHI Low Energy Building? **yes**
Signature:

Building energy standard
3-PHI Low Energy Building

Class
1-Classic

Verification of primary energy
2-PER (renewable)

EnerPHit verification method

New building / Refurbishment
1-New building