



Diverse Voices – Global Adaptation of Passive House: Culture, Climate and Challenges



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BUILDING INFORMATION

Category:	Residential
Status:	In planning
Building type:	New construction
Year of construction:	
Units:	1
Number of occupants:	9 (Design)
Occupant density:	143.2 m²/Person



Boundary conditions

Climate:	Lagos NI
Internal heat gains:	1.9 W/m²
Interior temperature:	20 °C
Overheat temperature:	25 °C

Building geometry

Enclosed volume:	5,219.2 m³
Net-volume:	3,966.6 m³
Total area envelope:	2,490.9 m²
Area/Volume Ratio:	0.5 1/m
Floor area:	1,288.8 m²
Envelope area/iCFA:	1.933

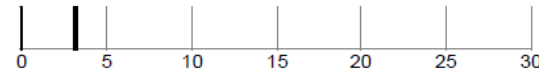
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Certificate criteria:

PHIUS+ 2018

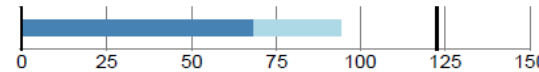
Heating demand

specific: **0** kWh/m²a
target: **3.15** kWh/m²a
total: **0** kWh/a



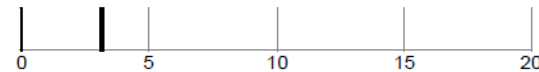
Cooling demand

sensible: **68.4** kWh/m²a
latent: **25.73** kWh/m²a
specific: **94.13** kWh/m²a
target: **122.4** kWh/m²a
total: **121,308.94** kWh/a



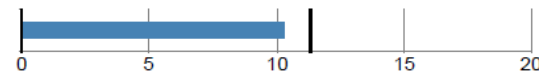
Heating load

specific: **0** W/m²
target: **3.15** W/m²
total: **0** W



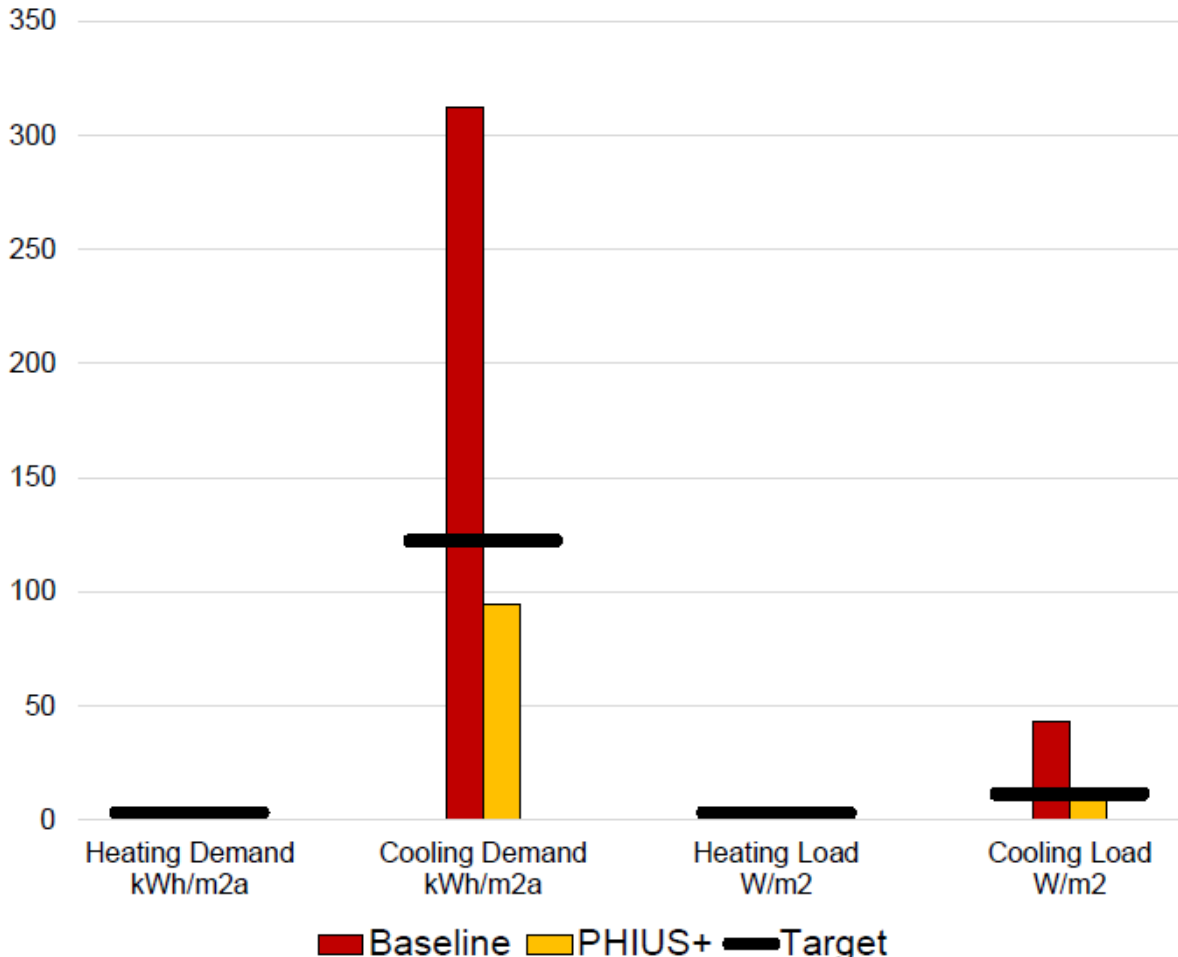
Cooling load

specific: **10.27** W/m²
target: **11.36** W/m²
total: **13,231.05** W



Comparison Report

PHIUS+ Space Conditioning Criteria



PHIUS+ Source Energy Criteria

