## **Certificate**

Certified Passive House Classic



Herz & Lang GmbH Ritzensonnenhalb 5a 87480 Weitnau, Germany Authorised by:



Dr. Wolfgang Feist 64283 Darmstadt Germany

## pilot project "Passive House in Dubai" Al Khawaneej Street, Al Khawaneej, Vereinigte Arabische Emirate



Client	MBRSC - Mohammed Bin Rashid Space Centre Al Khawaneej Street Al Khawaneej, Vereinigte Arabische Emirate
Architect	Casetta&Partners via Verdi, 67 31046 Oderzo, Italien
Building Services	Energy Plus Project piazzetta San Marco, 7/8 31053 Pieve di Soligo,
Energy Consultant	University of Bergamo Viale Marconi, 5 24044 Dalmine, Italien

Passive House buildings offer excellent thermal comfort and very good air quality all year round. Due to their high energy efficiency, energy costs as well as greenhouse gas emissions are extremely low.

The design of the above-mentioned building meets the criteria defined by the Passive House Institute for the 'Passive House Classic' standard:

Building quality	This building		Criteria	Alternative criteria	
Heating					
Heating demand	[kWh/(m²a)]	0	≤	15	-
Heating load	[W/m²]		≤		<u>.</u>
Cooling					
Cooling + dehumidification demand	[kWh/(m²a)]	50	≤	19	57
Cooling load	[W/m²]	10	≤	<u>.</u>	11
Frequency of overheating (> 25 °C)	[%]		≤		
Frequency of excessively high humidity	[%]	0	≤	10	
Airtightness					
Pressurization test result (n <sub>50</sub> )	[1/h]	0,5	≤	0,6	
Non-renewable primary energy (PE)					• •
PE demand	[kWh/(m²a)]	143	≤		
Renewable primary energy (PER)					
PER-demand	[kWh/(m²a)]	73	≤	60	73
Generation (reference to ground area)	[kWh/(m²a)]	185	≥	-	19

The associated certification booklet contains more characteristic values for this building.

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Certifier: Herz & Lang GmbH

DI (FH) Florian Lang