

Region: Calabria Archetype code: **Building category:** Residential buildings - Apartments (in multifamily blocks) RES APPBLOCK 1991-2000_B_CAL **Period of construction:** 1991-2000 **Climatic zone:** Number of records:

Description (the codes associated with walls and slabs refer to the structures described in UNI/TR 11552:2014): External walls: double layer of hollow bricks (12 cm + 12 cm) with uninsulated air gap (cod. MCV01).

Roof slabs: no data available

В

Data sources: Survey data (52%) Measured data (16%) Expert assumptions (13%)

		ı					Others (19%) #				
	Data	Symbol	Unit of	Mean	Standard	Q1 (first	Median	Q3 (third			
BUILDING GEOMETRY	Number of floors	_	measure -	value	deviation	quartile)	value	quartile)			
	Number of floors	n _f		2.00	1.41	1.00	1.00	3.00			
	Gross height	Hg	m2	-	-	-	-	-			
	Footprint area	A _{footprint}	m ²	-	-	-	-	-			
	Heated gross floor area	A _{H;g}	m ²	-	-	-	-	-			
	Heated net floor area	A _{H;n}	m ²	-	-	-	-	-			
	Heated gross volume	V _{H;g}	m ³	-	-	-	-	-			
	Heated net volume	V _{H;n}	m³	-	-	-	-	-			
	Compactness ratio	A _{env} /V _{H;g}	m ⁻¹	0.38	0.13	0.23	0.44	0.48			
	WWR – North orientation	WWR _N	-	0.16	0.08	0.09	0.14	0.24			
5	WWR – South orientation	<i>WWR</i> s	-	0.18	0.14	0.08	0.12	0.35			
	WWR – East orientation	WWR _E	-	0.27	0.14	0.17	0.27	0.37			
	WWR – West orientation	<i>WWR</i> _W	-	0.13	0.05	0.08	0.14	0.17			
	Window to useful floor area ratio	A _{wi} /A _{use}	-	0.16	0.05	0.12	0.15	0.21			
	Roof type -										
	<i>U</i> -value of the roof	U _{fl;up}	W/(m ² ·K)	1.06	0.55	0.58	0.96	1.60			
	External walls type	Hollow brick masonry: 100%									
Ä	<i>U</i> -value of the wall	U _{wl}	W/(m ² ·K)	0.82	0.33	0.54	0.70	1.17			
9	Slab on ground floor type	-									
ENVELOPE	<i>U</i> -value of the floor	U _{fl;lw}	W/(m ² ·K)	1.02	0.52	0.54	0.97	1.54			
	Windows type	Double glazing, wooden frame: 60%, Double glazing, aluminum frame, no thermal break: 20%, Single glazing, wooden frame: 20%									
	<i>U</i> -value of the windows	U _W	W/(m ² ·K)	2.55	0.22	2.47	2.55	2.62			
	Shading system type		Shutter: 40%, Roller blinds: 20%, Curtains: 20%, Unknown: 20%								
-	Occupancy density	O _C	person/m ²	0.026	0.010	0.019	0.019	0.036			
VENTILATION	Lighting power density *	W _L	W/m ²	UNI EN 16798-1 - A.8.3							
GAIINS AIIG	Equipment power density *	W _A W/m ² UNI EN 16798-1 - A.8.3									
Ę	Type of ventilation	Natural: 100%									
, <u> </u>	Air exchange rate *	n	h ⁻¹	0.30	0.00	0.30	0.30	0.30			
	Heating system type	Autonomous: 100%									
THERMAL SYSTEMS	Heating generator	Traditional Boiler: 80%, Condensing Boiler: 20%									
	Daily operating time of the heating system *	t _H	h	8.00	0.00	8.00	8.00	8.00			
	Energy carrier	Natural Gas: 100%									
	Heating emission sub-system	Radiators: 100%									
	Cooling system type	Absent: 100%									
	Daily operating time of the cooling system	t _C	h	-	-	-	-	-			
	Cooling emission sub-system	_									
	DHW system type	Autonomous – coupled with heating: 100%									
	DHW generator	Natural gas boiler: 100%									
		(7%), EPC database (4%). ne considered sources, and are thus derived from UNI EN Standards									



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The data can be used for analysis, modeling, and research purposes, as long as it remains unaltered in its original form. Users are free to publish results based on the data, provided they credit the original source.



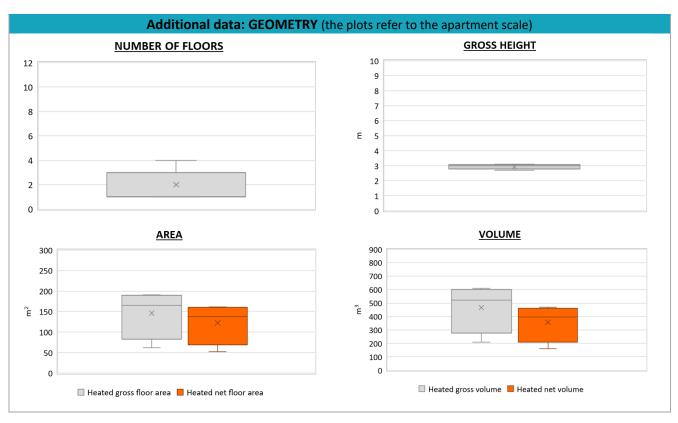
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ADDITIONAL DATA											
	Data	Symbol	Unit of	Mean	Standard	Q1 (first	Median	Q3 (third			
GEOMETRY: apartments			measure	value	deviation	quartile)	value	quartile)			
	Inter-storey height	H _n	m	2.95	0.17	2.78	3.00	3.08			
	Heated gross floor area	$A_{H;g}$	m²	145.91	59.59	82.75	165.43	189.55			
	Heated net floor area	$A_{H;n}$	m²	122.46	50.47	69.00	138.20	160.19			
	Heated gross volume	$V_{H;g}$	m³	466.62	180.63	276.06	523.58	600.20			
	Heated net volume	$V_{H;n}$	m³	356.58	138.04	210.90	397.96	460.88			
THERMAL SYSTEMS	Heating efficiency or COP	η _{H;gen} or <i>COP</i> H;gen	-	This value has to be retrieved from suitable datasheets							
	Total heating power *	P _{H;gen}	kW	20.54	9.26	10.80	24.00	28.55			
	Cooling efficiency or EER	$\eta_{ extsf{C};gen}$ or $ extsf{\textit{EER}}_{ extsf{C};gen}$	-	This value has to be retrieved from suitable datasheets							
	Total cooling power	P _{C;gen}	kW	-	-	-	-	-			
	Temperature of DHW	θ_{W}	°C	40.00	0.00	40.00	40.00	40.00			
	DHW system power	P _{W;gen}	kW	-	-	-	-	-			
	* These values refer to the apartment scale										





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