

Region: Calabria		Calabria						Archetype code:			
Building category: Residential bu		uildings – Ap	partments (in r	RES_APPBLOCK_							
Period of construction: 1971-1980					<u> </u>		1971-1980_D_CAL				
Climatic zone: D		Number of records: 31									
		ciated with walls	s and slabs re	fer to the struct				Data s	ources:		
•			and slabs refer to the structures described in UNI/TR 11552:2014): cks (12 cm + 12 cm) with uninsulated air gap (cod. MCV01).					Survey data (52%) Measured data (16%) Expert assumptions (12%) Others (20%) #			
	Data		Symbol	Unit of	Mean	Standard	Q1 (first	Median	Q3 (third		
				measure	value	deviation	quartile)	value	quartile)		
	Number of floor	rs	n <sub>f</sub>	-	2.67	1.42	2.00	2.50	3.00		
	Gross height		Hg	m	-	-	-	-	-		
	Footprint area		A <sub>footprint</sub>	m <sup>2</sup>	-	-	-	-	-		
≿	Heated gross floor area		A <sub>H;g</sub>	m <sup>2</sup>	-	-	-	-	-		
E.	Heated net floor area		A <sub>H;n</sub>	m <sup>2</sup>	-	-	-	-	-		
NO	Heated gross volume		V <sub>H;g</sub>	m <sup>3</sup>	-	-	-	-	-		
GE	Heated net volume		V <sub>H;n</sub>	m <sup>3</sup>	-	-	-	-	-		
BUILDING GEOMETRY	Compactness ra	tio	$A_{\rm env}/V_{\rm H;g}$	m <sup>-1</sup>	0.46	0.18	0.30	0.47	0.61		
	WWR – North o	rientation	WWR <sub>N</sub>	-	0.11	0.07	0.05	0.10	0.16		
Ĩ	WWR – South orientation		WWRs	-	0.15	0.09	0.07	0.17	0.24		
-	WWR – East orientation		WWR <sub>E</sub>	-	0.16	0.14	0.04	0.13	0.23		
	WWR – West orientation		WWRw	-	0.16	0.17	0.05	0.14	0.24		
	Window to useful floor area ratio		A <sub>wi</sub> /A <sub>use</sub>	-	0.14	0.07	0.09	0.12	0.18		
	Roof type -										
	U-value of the roof		U <sub>fl;up</sub>	W/(m²⋅K)	1.10	0.58	0.43	1.20	1.52		
	External walls type		Hollow brick masonry: 84%, Solid brick masonry: 16%								
	<i>U</i> -value of the wall		U <sub>wl</sub>	W/(m²⋅K)	0.78	0.36	0.43	0.73	0.97		
ENVELOPE	Slab on ground floor type				1	-			1		
Ē	U-value of the f	loor	U <sub>fl;lw</sub>	W/(m²·K)	0.97	0.63	0.44	0.97	1.23		
EN	Windows type		Double glazing, aluminum frame, no thermal break: 42%, Single glazing, wooden frame: 32%, Single glazing, aluminum frame: 10%, Double glazing, PVC frame: 7%, Double glazing, aluminum frame wi thermal break: 3%, Double glazing, wooden frame: 3%, Unknown: 3%								
	U-value of the windows		Uw	W/(m <sup>2</sup> ·K)	3.42	1.14	2.70	2.90	4.90		
	Shading system	type		,,,,,,			5, Curtains: 3%, U				
		Occupancy density		person/m <sup>2</sup>	0.039	0.032	0.019	0.033	0.046		
GAINS and VENTILATION	· · ·		0 <sub>C</sub> W <sub>L</sub>	W/m <sup>2</sup>	0.000	0.052					
AT		Lighting power density * Equipment power density *									
GAINS and ENTILATIOI	Type of ventilat			W <sub>A</sub> W/m <sup>2</sup> UNI EN 16798-1 - A.8.3           Natural: 100%							
	Air exchange ra		n	h-1	0.30	0.00	0.30	0.30	0.30		
THERMAL SYSTEMS					1	1			0.50		
	Heating system type     Autonomous: 97%, Centralized: 3%       Heating generator     Traditional Boiler: 67%, Fireplace: 16%, Condensing Boiler: 10%, Unknown: 7%							a. 70/			
	Heating generator Daily operating time of the				er: 07%, Fir	epiace: 10%, C		er: 10%, Unknowi	1. 7%		
	heating system		tн	h	8.00	0.00	8.00	8.00	8.00		
	Energy carrier			ral Gas: 61% Sol	id biomass	: 16%   PG· 10	%. Electricity: 79	6. Gas Oil 3% 11n	known: 3%		
	Heating emission sub-system		Natural Gas: 61%, Solid biomass: 16%, LPG: 10%, Electricity: 7%, Gas Oil 3%, Unknown: 3% Radiators: 97%, Unknown: 3%								
	Cooling system type		Absent: 100%								
	Daily operating time of the cooling system		tc	h	-	-	-	-	-		
	Cooling system				1	-	I	l	1		
	DHW system ty										
						-					
	DHW generator										



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. Residential buildings – Apartment blocks – 1971/1980 – Zone D – Calabria

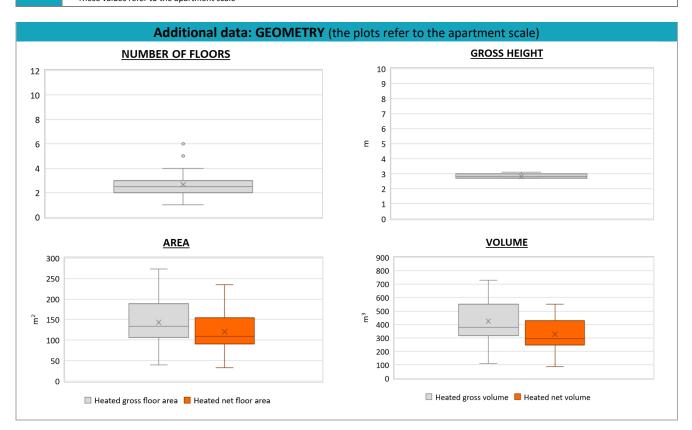






Region:	egion: Calabria				
Building category:	category: Residential buildings – Apartments (in multifamily blocks)				
Period of construction:	1971-1980	1971-1980_D_CAL			
Climatic zone:	D	Number of records:	31		

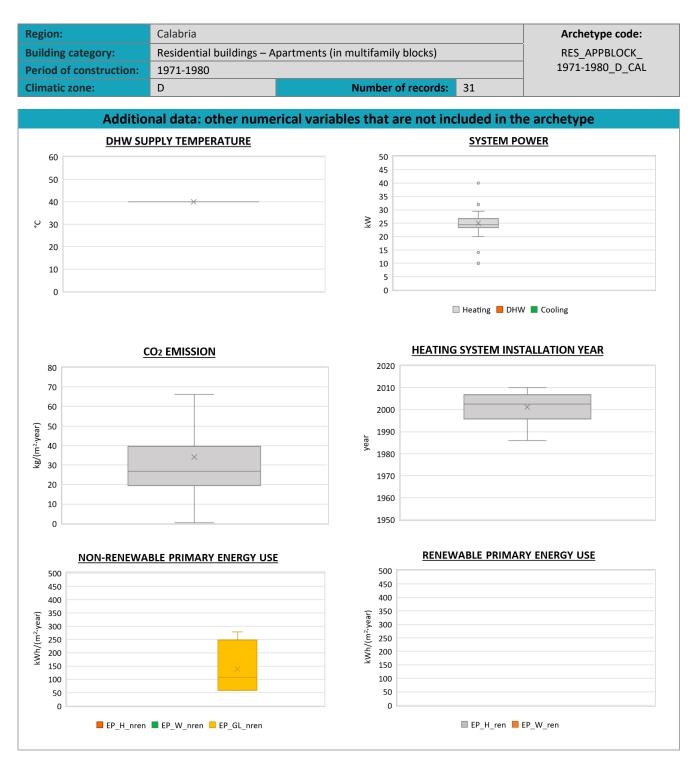
ADDITIONAL DATA								
	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)
GEOMETRY: apartments	Inter-storey height	H <sub>n</sub>	m	2.83	0.14	2.70	2.82	3.00
	Heated gross floor area	A <sub>H;g</sub>	m <sup>2</sup>	143.20	56.04	106.39	134.00	188.60
	Heated net floor area	A <sub>H;n</sub>	m <sup>2</sup>	120.30	46.81	90.72	109.28	154.04
	Heated gross volume	V <sub>H;g</sub>	m <sup>3</sup>	440.41	174.94	323.11	379.85	559.25
	Heated net volume	V <sub>H;n</sub>	m <sup>3</sup>	339.85	132.27	251.41	295.06	434.55
THERMAL SYSTEMS	Heating efficiency or COP	$\eta_{ m H;gen}$ or $\mathcal{COP}_{ m H;gen}$	-	This value has to be retrieved from suitable datasheets				
	Total heating power *	P <sub>H;gen</sub>	kW	24.98	5.53	23.30	24.40	27.35
	Cooling efficiency or EER	η <sub>C;gen</sub> or EER <sub>C;gen</sub>	-	This value has to be retrieved from suitable datasheets				
	Total cooling power	P <sub>C;gen</sub>	kW	-	-	-	-	-
	Temperature of DHW	θw	°C	40.00	0.00	40.00	40.00	40.00
	DHW system power	P <sub>W;gen</sub>	kW	-	-	-	-	-
	* These values refer to the apartment scale							





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. Residential buildings – Apartment blocks – 1971/1980 – Zone D – Calabria







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. Residential buildings – Apartment blocks – 1971/1980 – Zone D – Calabria