

Period o	category:	Decidential b			iguria						
		Residential b	uildings – Ap	partments in m	RES_APPBLOCK_						
Climatic	Period of construction: -1950 Climatic zone: F				-1950_						
			Number of records: 367								
Description:							Data sources:				
-		- ilabla						EPC databa			
	<u>walls:</u> no data av <u>bs: </u> no data availa										
NOUT STAL	<u>05. </u> 110 uata avalla	bie									
	Data		Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Q2 (Median value)	Q3 (third quartile)		
	Number of floors		nf	-	-	-	-	-	-		
	Gross height		Hg	m	-	-	-	-	-		
	Footprint area		A _{footprint}	m²	-	-	-	-	-		
	Heated gross floor area		A _{H;g}	m²	-	-	-	-	-		
ТΓ	Heated net floor area		A _{H;n}	m²	-	-	-	-	-		
μ	Heated gross volume		V _{H;g}	m ³	-	_	-	_	-		
E E	Heated net volume		V _{H;n}	m ³	-	-	_	_	-		
9 9	Compactness ratio		$A_{\rm env}/V_{\rm H;g}$	m ⁻¹	0.75	0.26	0.57	0.73	0.89		
BUILDING GEOMETRY	WWR – North orientation		WWR _N	-	-	-	-		-		
3	WWR – South o		WWR _s	-	-	_	_		_		
ā -	WWR – East orientation		WWR _E				-				
-			WWRw		_	_	_	_	_		
-		WWR – West orientation Window to useful floor area		-	-	-	-	-	-		
	ratio		A _{wi} /A _{use}	-	0.10	0.03	0.08	0.09	0.11		
	Roof type				I	-	1	11			
-	U-value of the roof		U _{fl;up}	W/(m²·K)	1.51	0.69	0.93	1.58	1.85		
-	External walls type										
щ	U-value of the wall		U _{wl}	W/(m²·K)	1.89	0.61	1.36	2.06	2.34		
	Slab on ground floor type			W /(III K)	1.05	- 0.01	1.50	2.00	2.54		
ENVELOPE		alue of the floor		W/(m²⋅K)	1.70	0.60	1.45	1.64	1.91		
Ξ.	Windows type		U _{fl;lw}	W/(III K)	1.70	- 0.00	1.45	1.04	1.51		
-	U-value of the windows		Uw	W/(m²·K)	4.26	1.13	3.69	4.51	5.05		
-	Shading system type		0	W /(III K)	4.20	1.15	5.05	4.51	5.05		
	Occupancy density *		Oc person/m ² UNI EN 16798-1 - Table A.19								
and TION			0 _C	W/m ²	UNI EN 16798-1 - Table A.19 UNI EN 16798-1 - A.8.3						
S ar ATI	Lighting power density *		W _L								
GAINS	Equipment power density *		WA W/m² UNI EN 16798-1 - A.8.3 Natural: 100% Natural: 100%								
С С	Type of ventilation			h-1	0.20	1		0.20	0.20		
	Air exchange rate *										
-	Heating system type		Unknown: 98%; Autonomous: 2%								
-	Heating generator		Unknown: 75%; Traditional boiler: 13%; Fireplace: 10%; Condensing boiler: 2%								
	Daily operating time of the heating system *		No limitations								
-			Unknown: 76%; Natural gas: 9%; Electricity and solid biomass: 6%; Solid biomass: 4%; Gas								
MS	Energy carrier		Oil: 2%; Electricity and natural gas: 2%; LPG: 1%								
STEI	Heating emission sub-system		Unknown: 74%; Radiators: 17%; Air Ducts: 6%; Convectors: 1%: Radiant panels: 1%; Fan-								
THERMAL SYSTEMS			coil: 1%								
	Cooling system type				1	-		1			
	Daily operating cooling system ³		t _C	h	-	-	-	-	-		
	Cooling emission sub-system				1	-					
	DHW system type		· .								
			Unknown: 58%; Electric boiler: 29%; Natural gas boiler: 7%; Electric heat pump: 3%;								
	DHW generator		Condensing boiler: 3% ble in the considered sources, and are thus derived from UNI EN Standards								





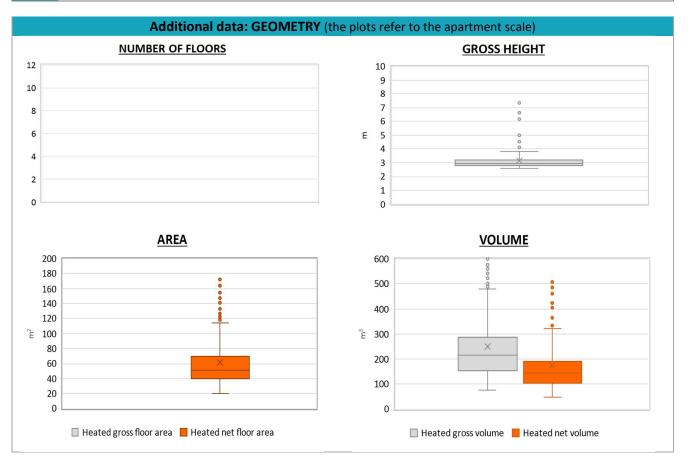


Residential buildings – Apartment blocks – -1950 – Zone F – Italy



Region:		Liguria			Archetype code:							
Building category:		Residential l	ouildings – Apa		RES_APPBLOCK_							
Period of construction: -:		-1950			-1950_F_LIG							
Climatic zone:		F		N	umber of r	'						
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 _n	m	3.1	1.6	2.8	3.0	3.2			
	Heated gross floor area		A _{H;g}	m²	-	-	-	-	-			
	Heated net floor area		A _{H;n}	m²	61.3	51.5	40.0	51.7	70.0			
	Heated gross volume		V _{H;g}	m ³	249.2	237.1	154.2	217.0	285.7			
9 U	Heated net volume		V _{H;n}	m ³	176.9	184.2	104.5	143.9	192.2			
S	Heating efficiency or COP		η _{H;gen} or COP _{H;gen}	-	This value has to be retrieved from suitable datasheets							
E M	Total heating power *		P _{H;gen}	kW	19.8	9.4	9.4	24.0	24.3			
THERMAL SYSTEMS	Cooling efficiency or EER		η _{C;gen} or EER _{C;gen}	-	This value has to be retrieved from suitable datasheets							
	Total cooling power *		P _{C;gen}	kW	-	-	-	-	-			
	Temperature of DHW		θ_{W}	°C	-	-	-	-	-			
	DHW system power *		P _{W;gen}	kW	11.2	11.9	1.2	1.5	24.0			
	* These values	* These values refer to the anartment scale										

These values refer to the apartment scale



(c) ●

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 – -1950 – Zone F – Italy





NOTE: Sample size of the analysed data.

Compactness ratio: 367; Window to useful floor area ratio: 27; U-value of the roof: 55; U-value of the wall: 318; U-value of the floor: 30; U-value of the windows: 367; Inter-storey height: 367; Heated net floor area: 367; Heated gross volume: 367; Heated net volume: 367; Total heating power: 76; DHW system power: 201; CO2 Emission: 320; EP_H_nren: 367; EP_W_nren: 347; EP_GL_nren: 360; EP_H_ren: 7; EP_W_ren: 221

