Region:	Liguria			**Archetype code:** RES_APPBLOCK_ -1950_F_LIG
Building category:	Residential buildings – Apartments in multi-family block			
Period of construction:	-1950			
Climatic zone:	F	**Number of records:**	367	

Description:

External walls: no data available

Roof slabs: no data available

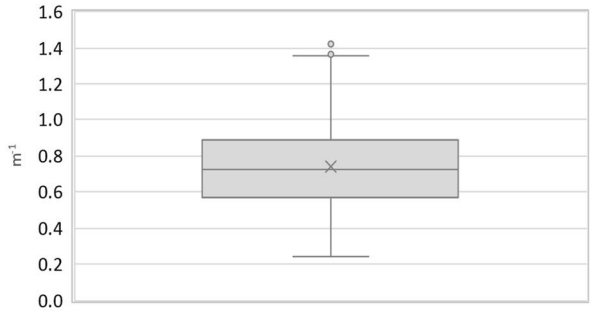
Data sources: EPC databases (100%)

	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Q2 (Median value)	Q3 (third quartile)
BUILDING GEOMETRY	Number of floors	n_f	-	-	-	-	-	-
	Gross height	H_g	m	-	-	-	-	-
	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	$V_{H;n}$	m^3	-	-	-	-	-
	Compactness ratio	$A_{env}/V_{H;g}$	m^{-1}	0.75	0.26	0.57	0.73	0.89
	WWR – North orientation	WWR_N	-	-	-	-	-	-
	WWR – South orientation	WWR_S	-	-	-	-	-	-
	WWR – East orientation	WWR_E	-	-	-	-	-	-
	WWR – West orientation	WWR_W	-	-	-	-	-	-
	Window to useful floor area ratio	A_{wi}/A_{use}	-	0.10	0.03	0.08	0.09	0.11
ENVELOPE	Roof type	-						
	U-value of the roof	$U_{fl;up}$	$W/(m^2 \cdot K)$	1.51	0.69	0.93	1.58	1.85
	External walls type	-						
	U-value of the wall	U_{wl}	$W/(m^2 \cdot K)$	1.89	0.61	1.36	2.06	2.34
	Slab on ground floor type	-						
	U-value of the floor	$U_{fl;lw}$	$W/(m^2 \cdot K)$	1.70	0.60	1.45	1.64	1.91
	Windows type	-						
	U-value of the windows	U_W	$W/(m^2 \cdot K)$	4.26	1.13	3.69	4.51	5.05
	Shading system type	-						
GAINS and VENTILATION	Occupancy density *	O_C	$person/m^2$	UNI EN 16798-1 - Table A.19				
	Lighting power density *	W_L	W/m^2	UNI EN 16798-1 - A.8.3				
	Equipment power density *	W_A	W/m^2	UNI EN 16798-1 - A.8.3				
	Type of ventilation	Natural: 100%						
	Air exchange rate *	n	h^{-1}	0.30	0.00	0.30	0.30	0.30
THERMAL SYSTEMS	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						
	Energy carrier	Unknown: 76%; Natural gas: 9%; Electricity and solid biomass: 6%; Solid biomass: 4%; Gas Oil: 2%; Electricity and natural gas: 2%; LPG: 1%						
	Heating emission sub-system	Unknown: 74%; Radiators: 17%; Air Ducts: 6%; Convectors: 1%: Radiant panels: 1%; Fan-coil: 1%						
	Cooling system type	-						
	Daily operating time of the cooling system *	t_C	h	-	-	-	-	-
	Cooling emission sub-system	-						
	DHW system type	-						
	DHW generator	Unknown: 58%; Electric boiler: 29%; Natural gas boiler: 7%; Electric heat pump: 3%; Condensing boiler: 3%						
	* These values were not available in the considered sources, and are thus derived from UNI EN Standards							

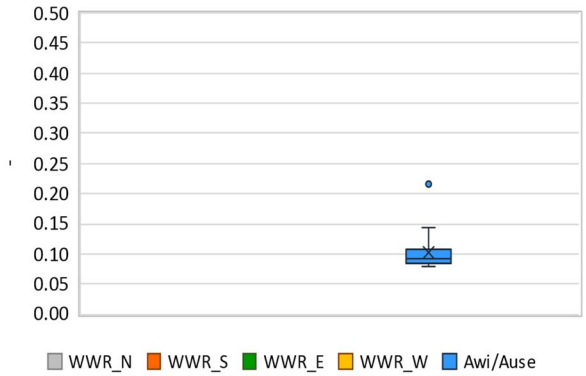
Region:	Liguria			**Archetype code:**
Building category:	Residential buildings – Apartments in multi-family block			RES_APPBLOCK_ -1950_F_LIG
Period of construction:	-1950			
Climatic zone:	F	**Number of records:**	367	

Numerical variables – GEOMETRY

COMPACTNESS RATIO

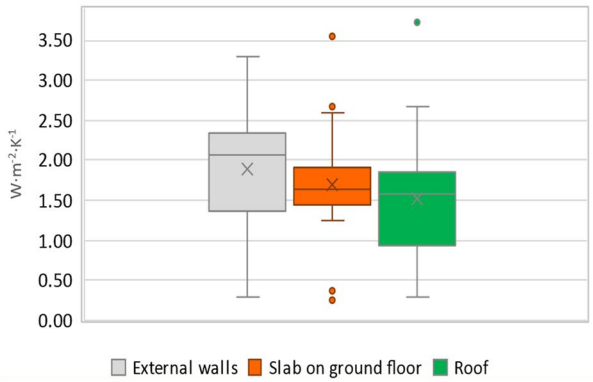


WINDOWS TO WALL RATIO

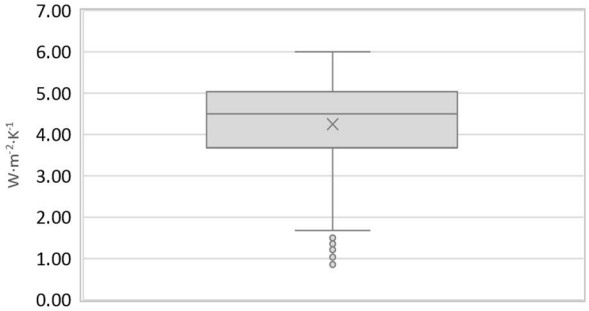


Numerical variables – ENVELOPE

OPAQUE BUILDING COMPONENTS U-VALUE



WINDOWS U-VALUE



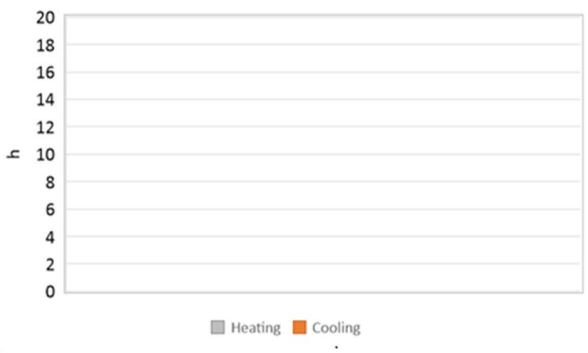
Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE (Standard Values)

AIR EXCHANGE RATE

OCCUPANCY DENSITY

INTERNAL GAINS POWER DENSITY

DAILY OPERATING TIME

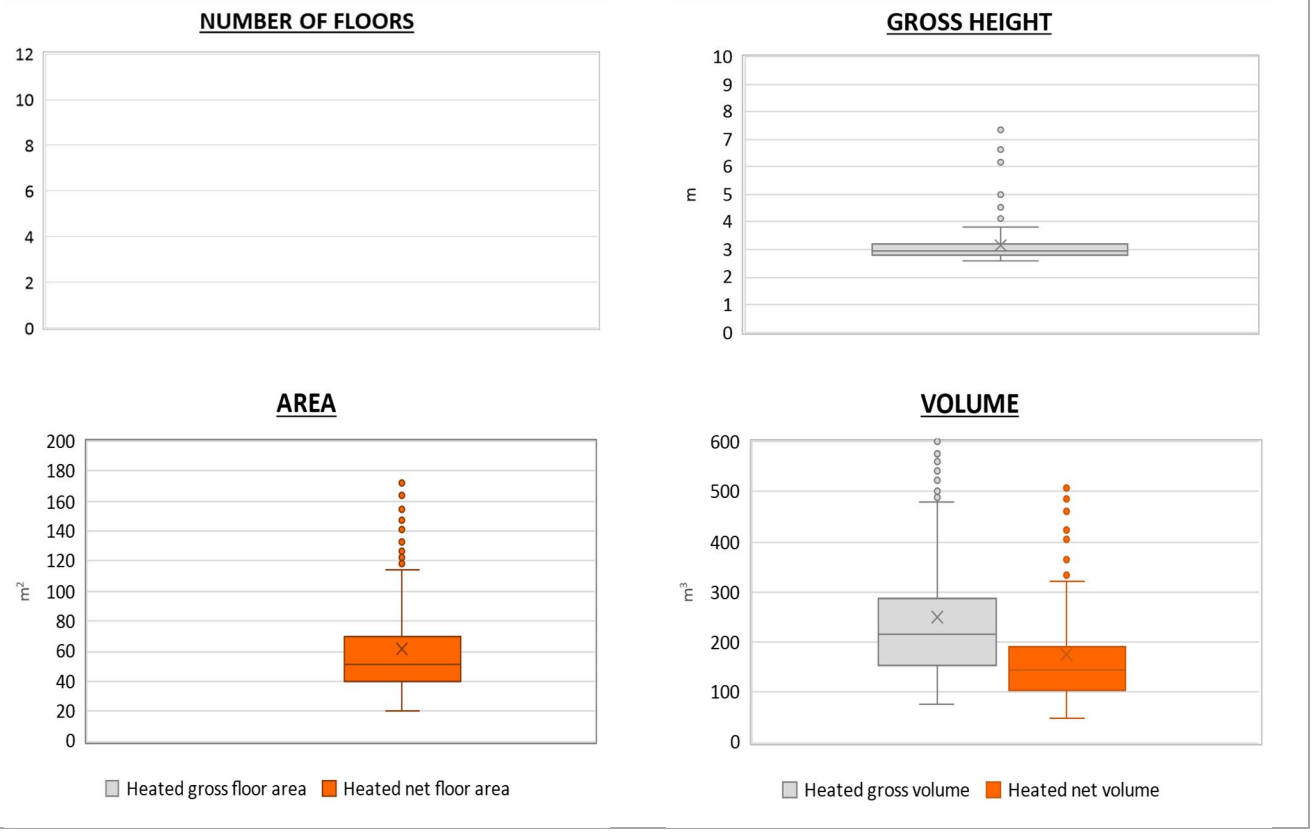


Region:	Liguria		**Archetype code:**
Building category:	Residential buildings – Apartments in multi-family block		RES_APPBLOCK_ -1950_F_LIG
Period of construction:	-1950		
Climatic zone:	F	**Number of records:** 367	

ADDITIONAL DATA

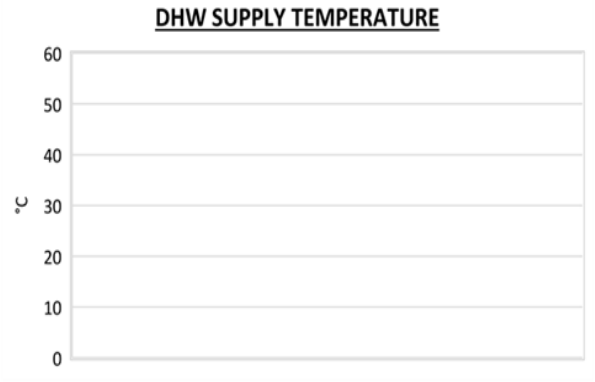
	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)
GEOMETRY: apartments	Inter-storey height	H_n	m	3.1	1.6	2.8	3.0	3.2
	Heated gross floor area	$A_{H;g}$	m²	-	-	-	-	-
	Heated net floor area	$A_{H;n}$	m²	61.3	51.5	40.0	51.7	70.0
	Heated gross volume	$V_{H;g}$	m³	249.2	237.1	154.2	217.0	285.7
	Heated net volume	$V_{H;n}$	m³	176.9	184.2	104.5	143.9	192.2
THERMAL SYSTEMS	Heating efficiency or *COP*	$\eta_{H;gen}$ or $COP_{H;gen}$	-	This value has to be retrieved from suitable datasheets				
	Total heating power *	$P_{H;gen}$	kW	19.8	9.4	9.4	24.0	24.3
	Cooling efficiency or *EER*	$\eta_{C;gen}$ 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 refer to the apartment scale							

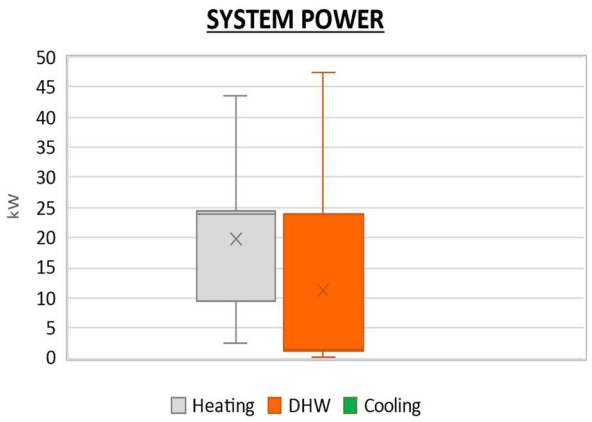
Additional data: GEOMETRY (the plots refer to the apartment scale)

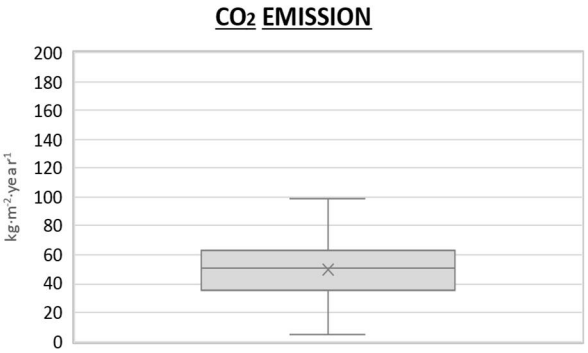


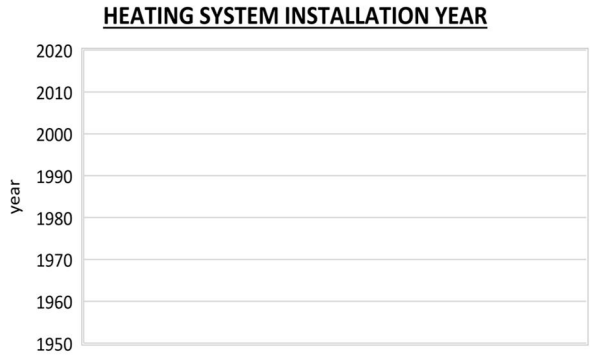
Region:	Liguria			**Archetype code:**
Building category:	Residential buildings – Apartments in multi-family block			RES_APPBLOCK_ -1950_F_LIG
Period of construction:	-1950			
Climatic zone:	F	**Number of records:**	367	

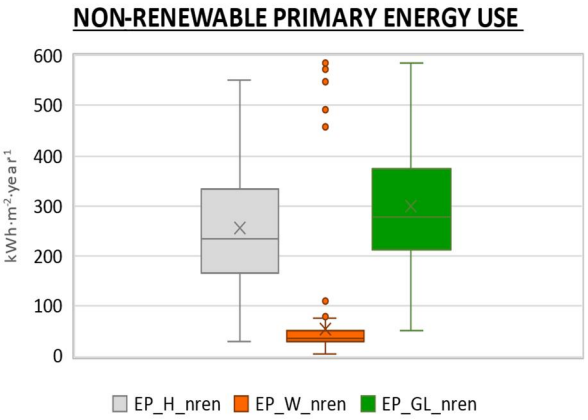
Additional data: other numerical variables that are not included in the archetype

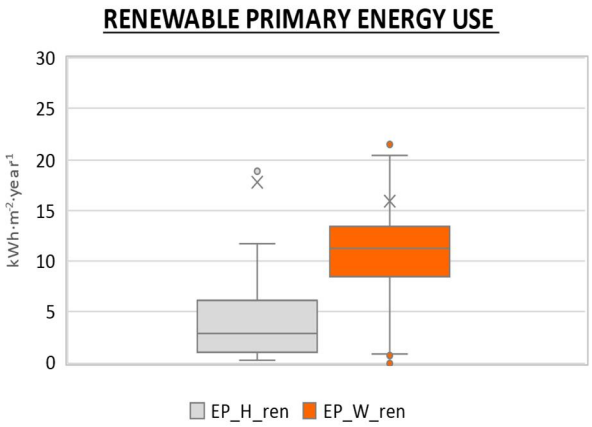












NOTE: Sample size of the analysed data.

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