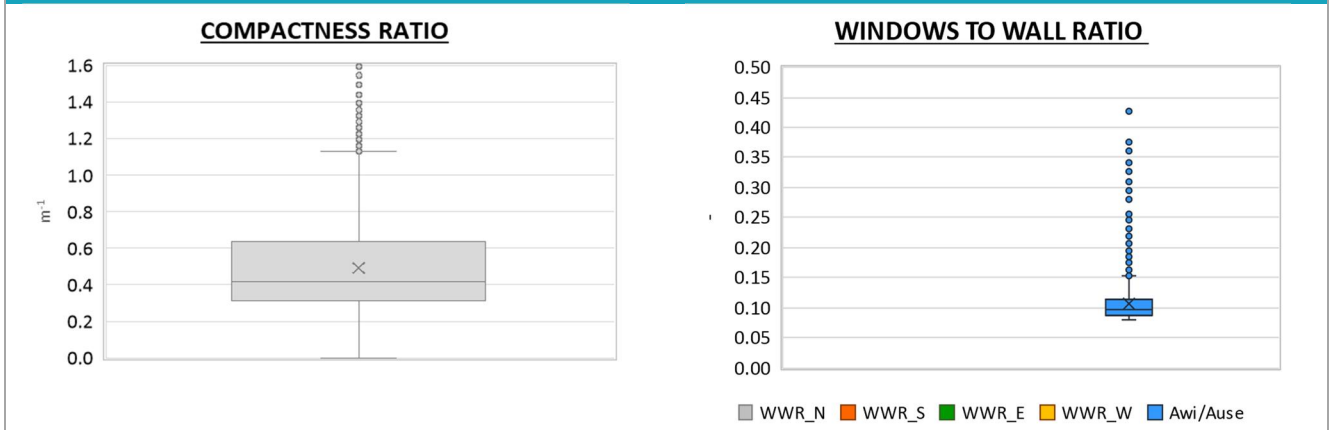
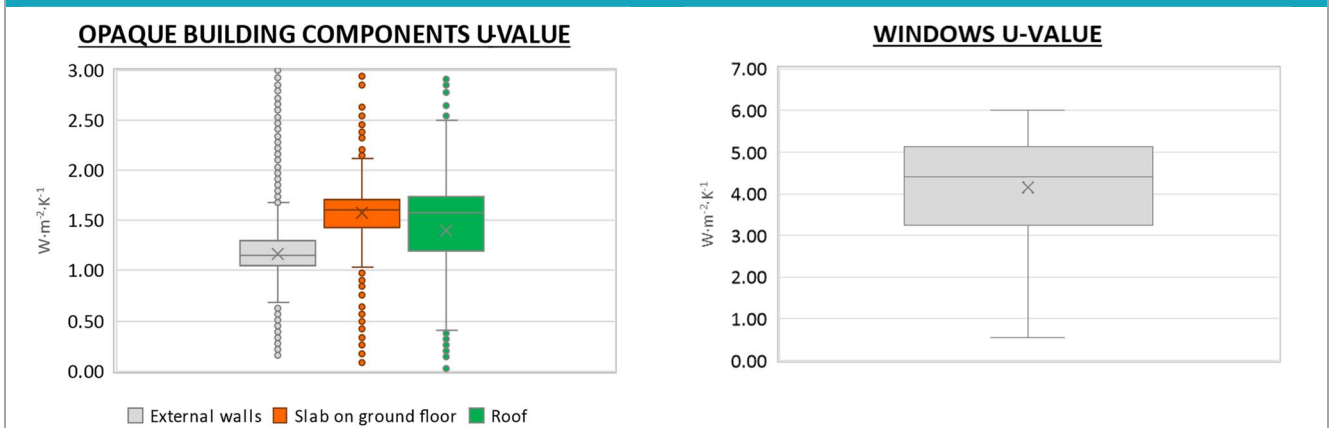
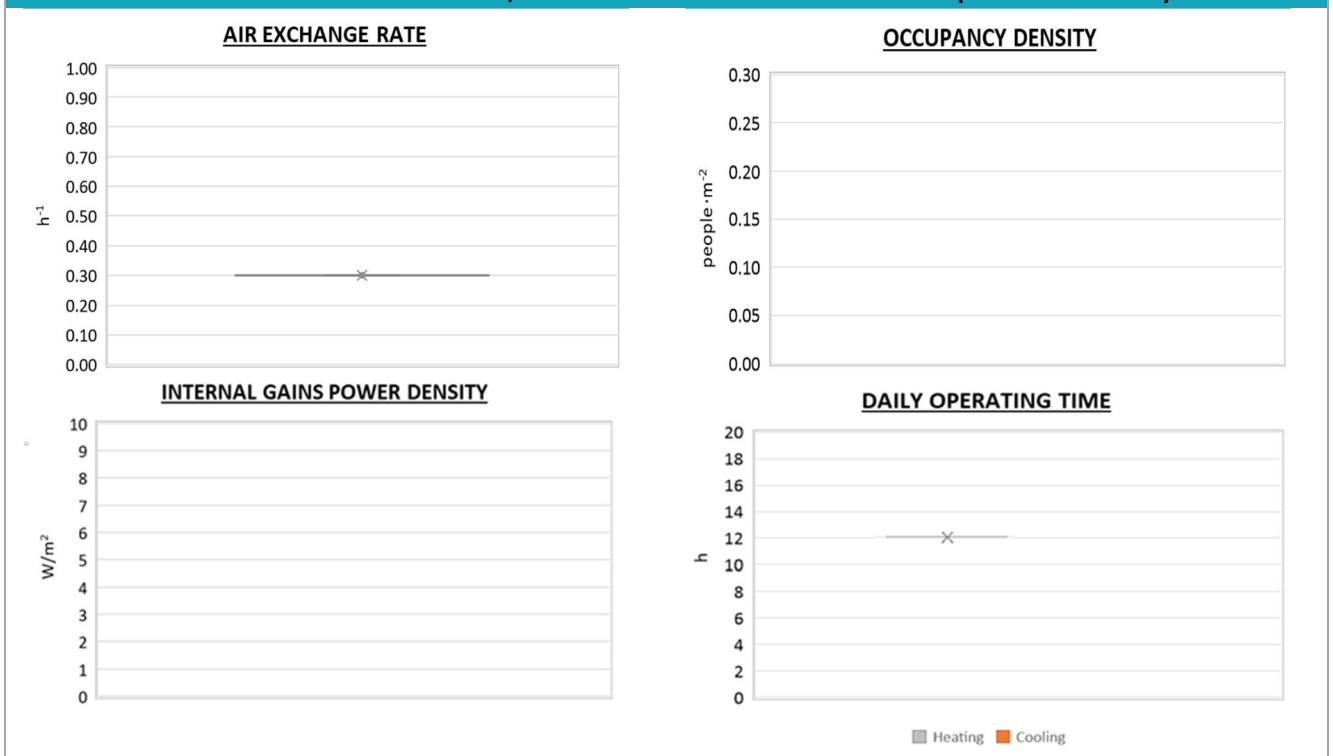


Region:		Liguria					Archetype code:		
Building category:		Residential buildings – Apartments in multi-family block					RES_APPBLOCK_		
Period of construction:		1961-1970					1961-1970_D_LIG		
Climatic zone:		D	Number of records:		16300				
Description:							Data sources:		
External walls: no data available							EPC databases (100%)		
Roof slabs: no data available									
	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	$A_{\text{footprint}}$	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	$A_{\text{env}}/V_{H,g}$	m ⁻¹	0.48	0.21	0.31	0.42	0.64	
	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}	-	0.11	0.04	0.09	0.10	0.11	
ENVELOPE	Roof type	-							
	U-value of the roof	$U_{fi;up}$	W/(m ² ·K)	1.41	0.60	1.20	1.58	1.74	
	External walls type	-							
	U-value of the wall	U_{wi}	W/(m ² ·K)	1.17	0.36	1.06	1.15	1.31	
	Slab on ground floor type	-							
	U-value of the floor	$U_{fi;lw}$	W/(m ² ·K)	1.58	0.45	1.43	1.61	1.71	
	Windows type	-							
U-value of the windows	U_w	W/(m ² ·K)	4.16	1.22	3.25	4.40	5.13		
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: 97%; Autonomous: 3%							
	Heating generator	Traditional boiler: 42%; Unknown: 34%; Condensing boiler: 23%; Air-source heat pump: 1%							
	Daily operating time of the heating system *	t_H	h	12	0	12	12	12	
	Energy carrier	Natural gas: 44%; Unknown: 34%; Electricity and natural gas: 20%; Electricity: 1%; Gas Oil: 1%							
	Heating emission sub-system	Radiators: 62%; Unknown: 34%; Radiant panels: 2%; Air Ducts: 1%; Fan-coil: 1%							
	Cooling system type	Unknown: 93%; Heat pump air-air: 7%							
	Daily operating time of the cooling system *	t_c	h	-	-	-	-	-	
	Cooling emission sub-system	-							
	DHW system type	-							
DHW generator	Unknown: 59%; Natural gas boiler: 13%; Condensing boiler: 13%; Electric boiler: 11%; Electric heat pump: 4%								

* These values were not available in the considered sources, and are thus derived from UNI EN Standards

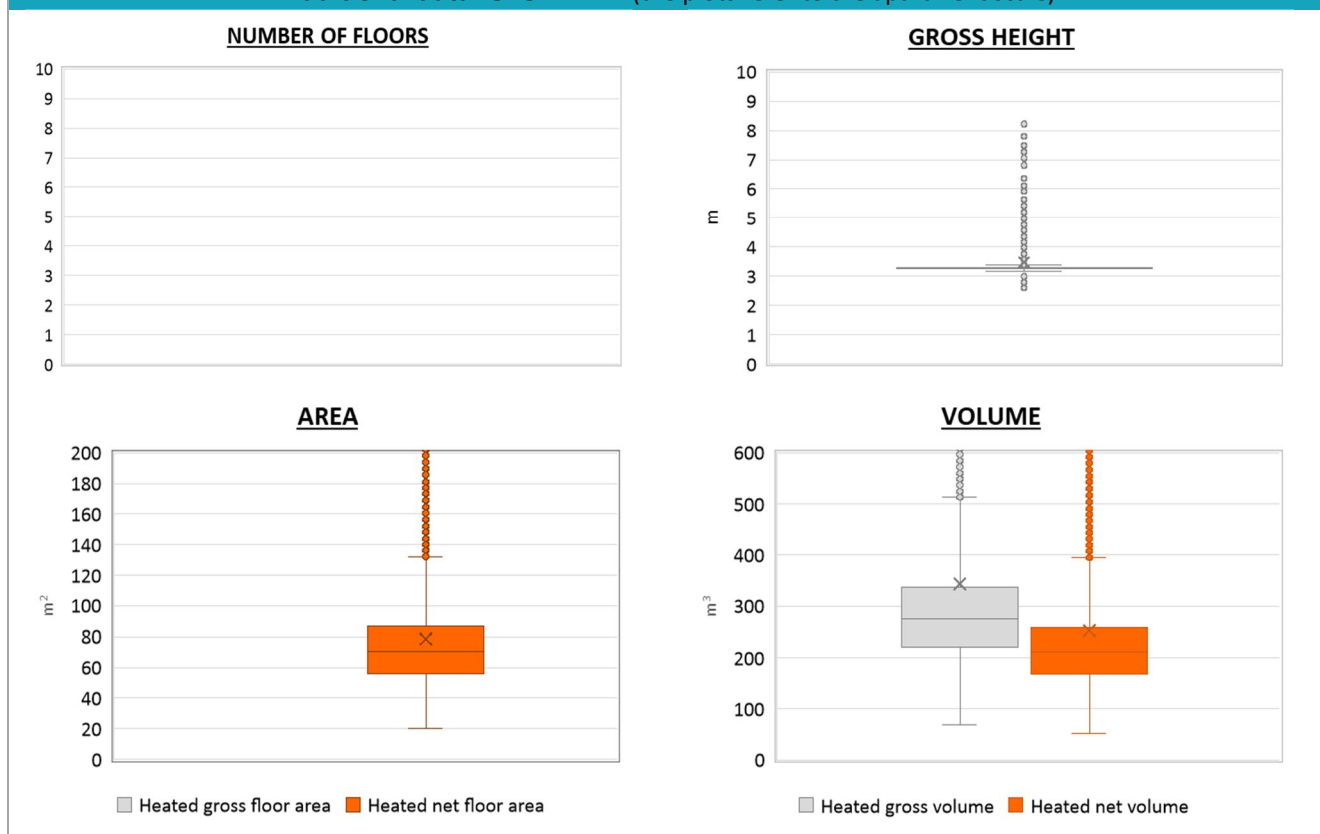
Region:	Liguria	Archetype code: RES_APPBLOCK_ 1961-1970_D_LIG
Building category:	Residential buildings – Apartments in multi-family block	
Period of construction:	1961-1970	
Climatic zone:	D	

Numerical variables – GEOMETRY

Numerical variables – ENVELOPE

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


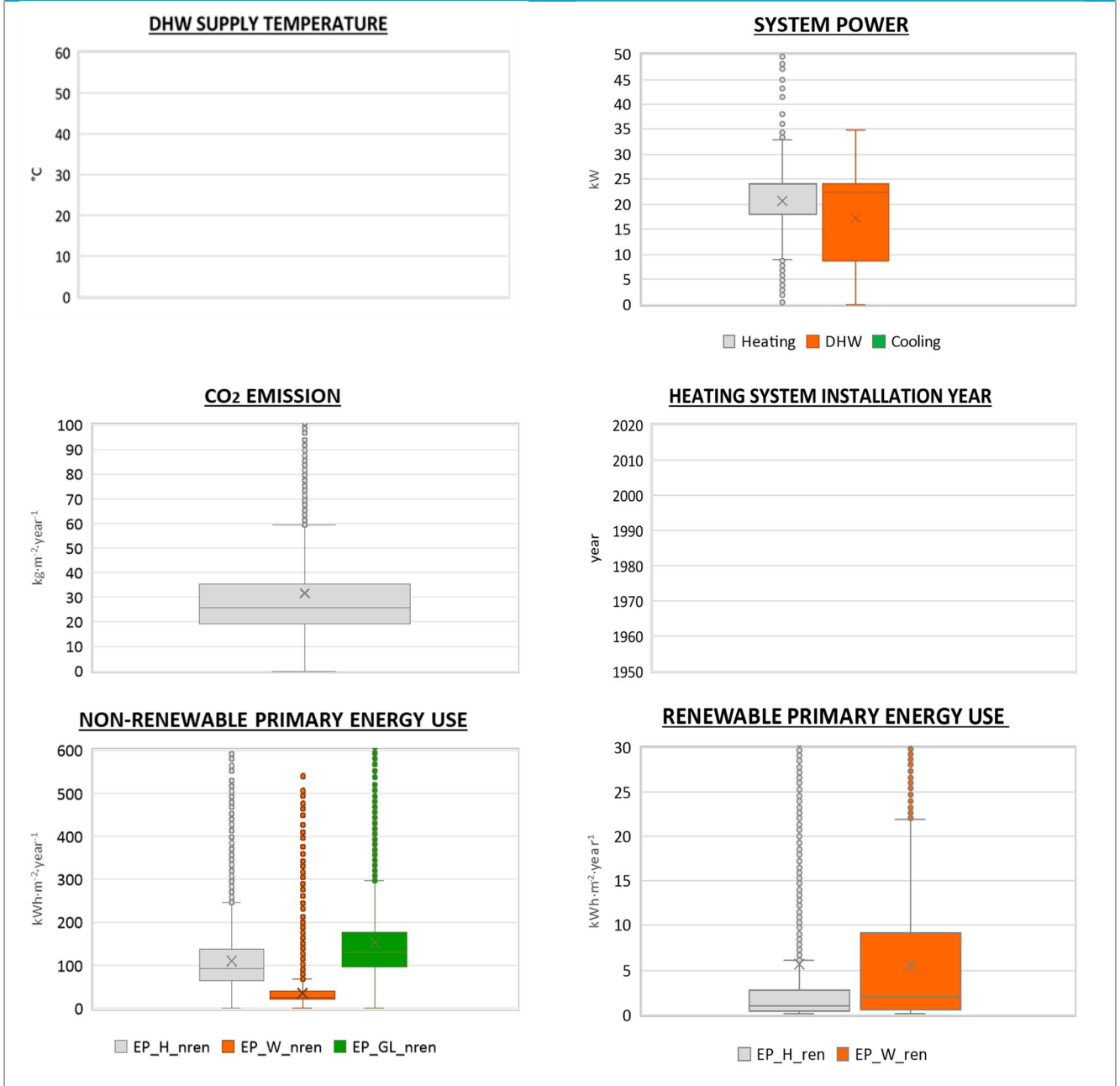
Region:	Liguria	Archetype code: RES_APPBLOCK_ 1961-1970_D_LIG
Building category:	Residential buildings – Apartments in multi-family block	
Period of construction:	1961-1970	
Climatic zone:	D	

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	3.3	0.2	3.2	3.3	3.3
	Heated gross floor area	$A_{H,g}$	m ²	-	-	-	-	-
	Heated net floor area	$A_{H,n}$	m ²	78.5	94.8	56.3	70.7	86.6
	Heated gross volume	$V_{H,g}$	m ³	343.3	3049.4	219.9	274.2	337.1
	Heated net volume	$V_{H,n}$	m ³	252.4	497.8	167.8	210.9	259.0
THERMAL SYSTEMS	Heating efficiency or <i>COP</i>	$\eta_{H,gen}$ or $COP_{H,gen}$	-	This value has to be retrieved from suitable datasheets				
	Total heating power *	$P_{H,gen}$	kW	20.6	7.4	18.0	24.0	24.0
	Cooling efficiency or <i>EER</i>	$\eta_{C,gen}$ 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	17.4	9.7	8.8	22.5	24.0

* These values refer to the apartment scale

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


Region:	Liguria	Archetype code: RES_APPBLOCK_ 1961-1970_D_LIG
Building category:	Residential buildings – Apartments in multi-family block	
Period of construction:	1961-1970	
Climatic zone:	D	

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


NOTE: Sample size of the analysed data.

Compactness ratio: 16294; Window to useful floor area ratio: 2019 ; U-value of the roof: 2288; U-value of the wall: 14054; U-value of the floor: 830; U-value of the windows: 16300; Inter-storey height: 16300; Heated net floor area: 16300; Heated gross volume: 16300; Heated net volume: 16300; Total heating power: 3927; DHW system power: 9781; CO₂ Emission: 16098; EP_H_nren: 16252; EP_W_nren: 15862; EP_GL_nren: 16213; EP_H_ren: 13340; EP_W_ren: 9693