Region:	Liguria			**Archetype code:** RES_BLDGS_ 1961-1970_D_LIG
Building category:	Residential buildings – Entire multifamily blocks			
Period of construction:	1961-1970			
Climatic zone:	D	**Number of records:**	419	

Description:

External walls: no data available
Roof slabs: no data available

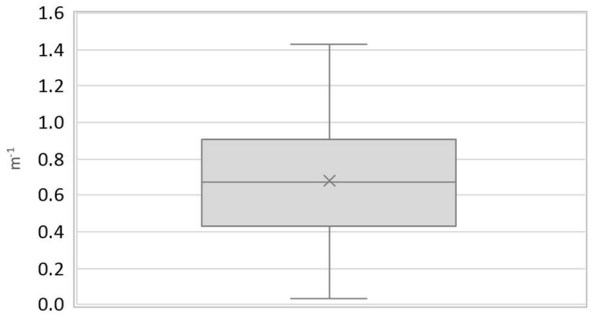
Data sources: EPC databases (100%)

	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	$A_{footprint}$	m²	-	-	-	-	-
	Heated gross floor area	$A_{H;g}$	m²	-	-	-	-	-
	Heated net floor area	$A_{H;n}$	m²	783.5	2649.1	80.1	128.9	495.3
	Heated gross volume	$V_{H;g}$	m³	2432.3	5467.2	311.1	471.9	1296.6
	Heated net volume	$V_{H;n}$	m³	1875.2	4321.5	229.7	343.9	955.7
	Compactness ratio	$A_{env}/V_{H;g}$	m⁻¹	0.68	0.27	0.43	0.67	0.91
	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}	-	0.12	0.06	0.08	0.10	0.12
ENVELOPE	Roof type	-						
	U-value of the roof	$U_{fl;up}$	W/(m²·K)	1.43	0.76	0.99	1.53	1.79
	External walls type	-						
	U-value of the wall	U_{wl}	W/(m²·K)	1.26	0.55	0.98	1.21	1.52
	Slab on ground floor type	-						
	U-value of the floor	$U_{fl;lw}$	W/(m²·K)	1.52	0.45	1.27	1.55	1.69
	Windows type	-						
	U-value of the windows	U_W	W/(m²·K)	3.82	1.25	3.01	3.75	4.80
	Shading system type	-						
GAINS and VENTILATION	Occupancy density *	O_C	person/m²	UNI EN 16798-1 - Table A.19				
	Lighting power density *	W_L	W/m²	UNI EN 16798-1 - A.8.3				
	Equipment power density *	W_A	W/m²	UNI EN 16798-1 - A.8.3				
	Type of ventilation	Natural 96%; Mechanical 4%						
	Air exchange rate *	n	h⁻¹	0.30	0.00	0.30	0.30	0.30
THERMAL SYSTEMS	Heating system type	Unknown: 96%; Autonomous: 3%; Centralized: 1%						
	Heating generator	Unknown: 45%; Traditional boiler: 33%; Condensing boiler: 16%; Air-source heat pump: 4%; Fireplace: 2%						
	Daily operating time of the heating system *	t_H	h	12	0	12	12	12
	Energy carrier	Unknown: 45%; Natural gas: 34%; Electricity and natural gas: 11%; Electricity: 4%; Electricity and solid biomass: 2%; LPG: 2%; Gas Oil: 1%; Electricity and gas oil: 1%						
	Heating emission sub-system	Radiators: 48%; Unknown: 45%; Air Ducts: 3%; Fan-coil: 2%; Convectors: 1%; Radiant panels: 1%						
	Cooling system type	Unknown: 85%; Heat pump air-air: 11%; Heat pump air-water: 4%						
	Daily operating time of the cooling system *	t_C	h	-	-	-	-	-
	Cooling emission sub-system	-						
	DHW system type	-						
	DHW generator	Unknown: 65%; Electric boiler: 14%; Condensing boiler: 13%; Natural gas boiler: 4%; Electric heat pump: 3%; Solar thermal: 1%						
	* These values were not available in the considered sources, and are thus derived from UNI EN Standards							

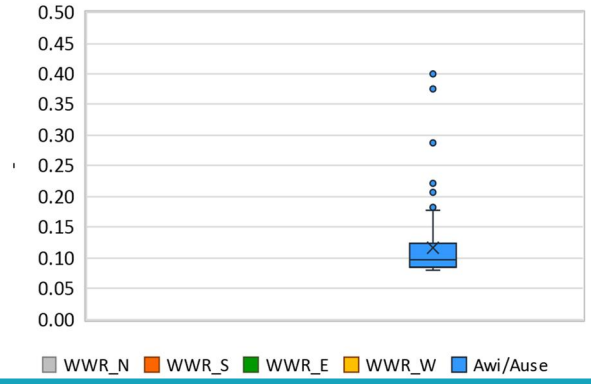
Region:	Liguria			**Archetype code:**
Building category:	Residential buildings – Entire multifamily blocks			RES_BLDGS_ 1961-1970_D_LIG
Period of construction:	1961-1970			
Climatic zone:	D	**Number of records:**	419	

Numerical variables – GEOMETRY

COMPACTNESS RATIO

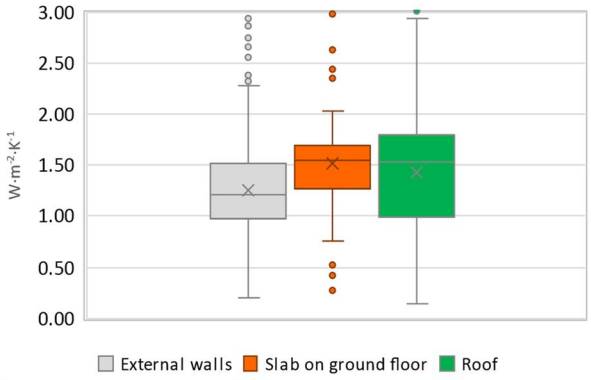


WINDOWS TO WALL RATIO



Numerical variables – ENVELOPE

OPAQUE BUILDING COMPONENTS U-VALUE



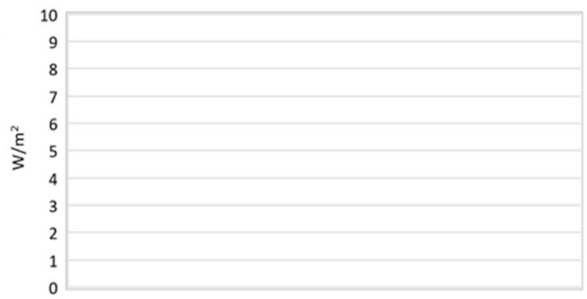
WINDOWS U-VALUE

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

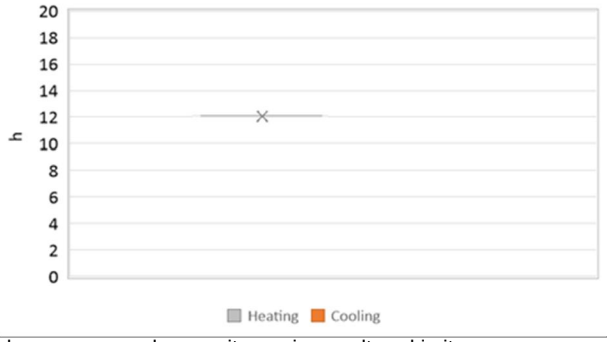
AIR EXCHANGE RATE

OCCUPANCY DENSITY

INTERNAL GAINS POWER DENSITY



DAILY OPERATING TIME

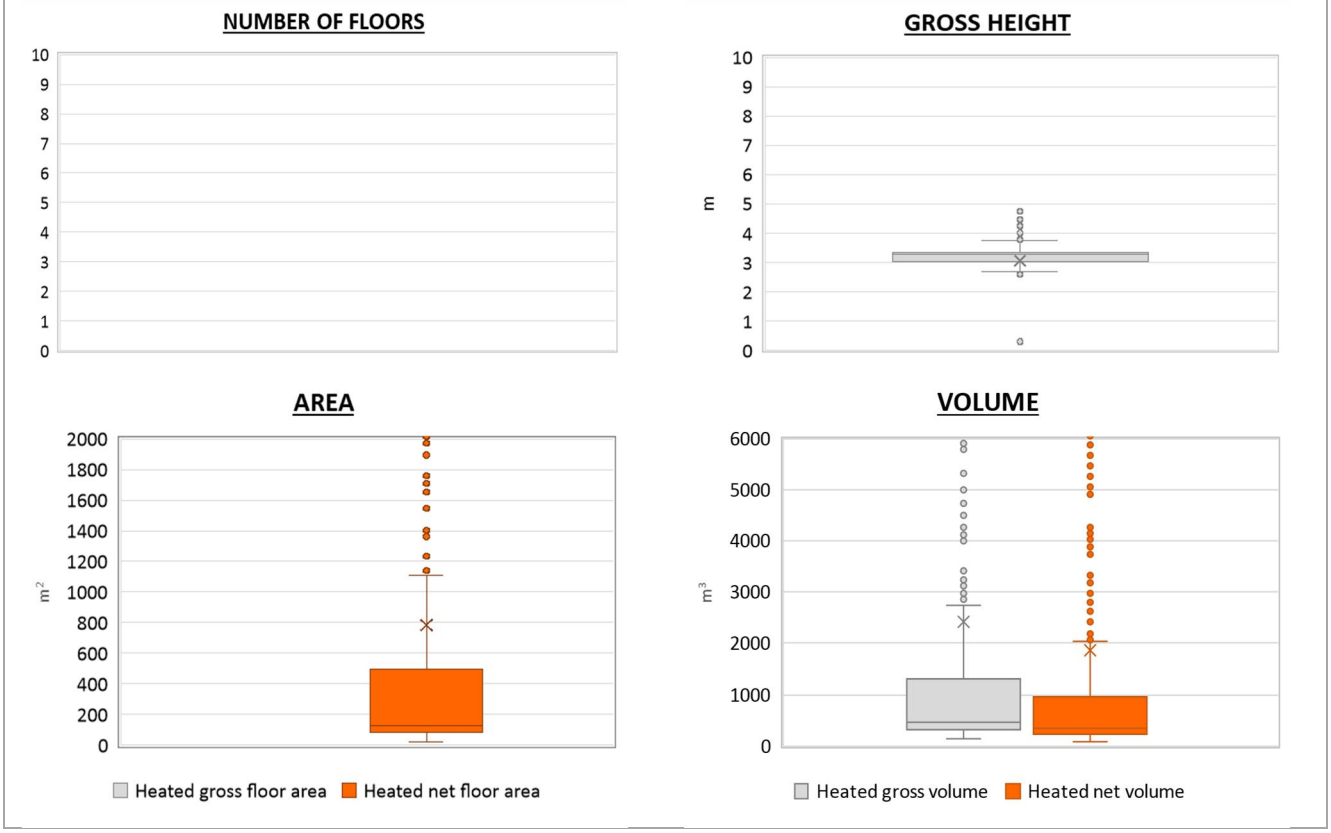


Region:	Liguria		**Archetype code:**
Building category:	Residential buildings – Entire multifamily blocks		RES_BLDGS_ 1961-1970_D_LIG
Period of construction:	1961-1970		
Climatic zone:	D	**Number of records:** 419	

ADDITIONAL DATA

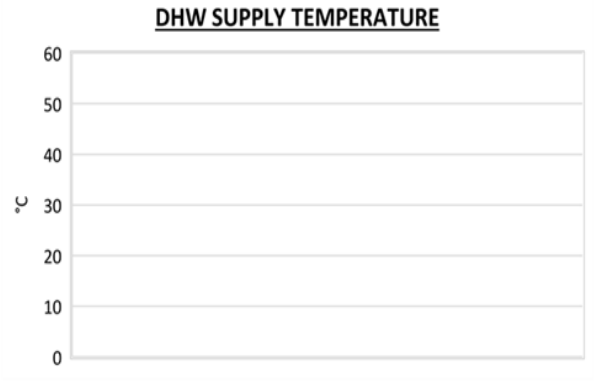
	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)
GEOMETRY: apartments	Inter-storey height	H_n	m	3.3	0.3	3.1	3.3	3.4
	Heated gross floor area	$A_{H;g}$	m^2	-	-	-	-	-
	Heated net floor area	$A_{H;n}$	m^2	-	-	-	-	-
	Heated gross volume	$V_{H;g}$	m^3	-	-	-	-	-
	Heated net volume	$V_{H;n}$	m^3	-	-	-	-	-
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	55.6	103.5	23.8	24.0	30.9
	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	17.3	10.8	4.3	23.6	24.3
	* These values refer to the apartment scale							

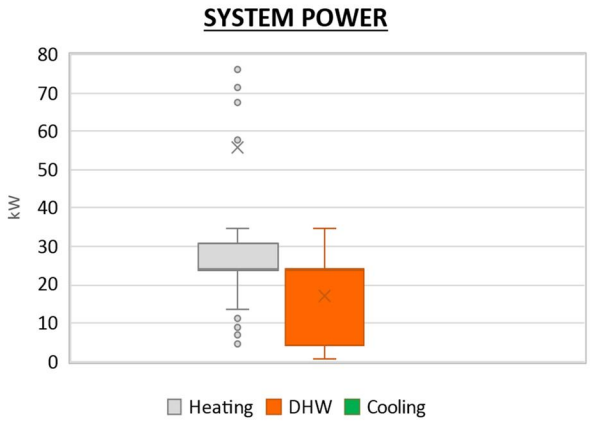
Additional data: GEOMETRY (the plots refer to the apartment scale)

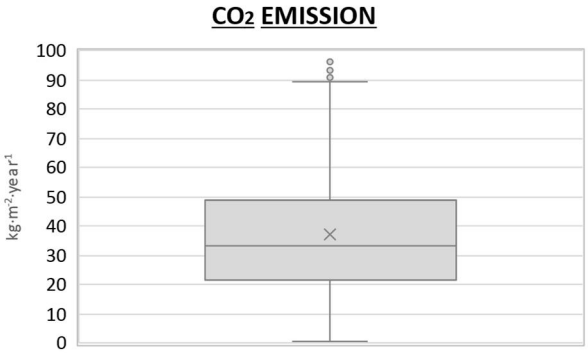


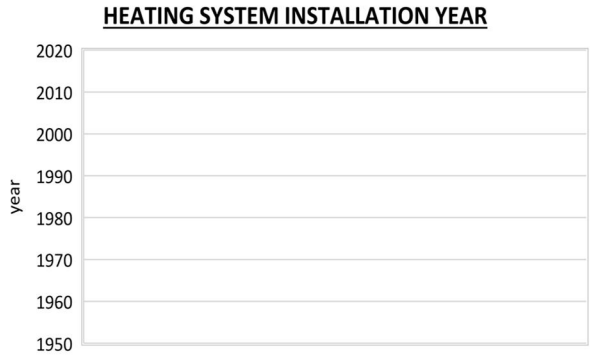
Region:	Liguria			**Archetype code:** RES_BLDGS_ 1961-1970_D_LIG
Building category:	Residential buildings – Entire multifamily blocks			
Period of construction:	1961-1970			
Climatic zone:	D	**Number of records:**	419	

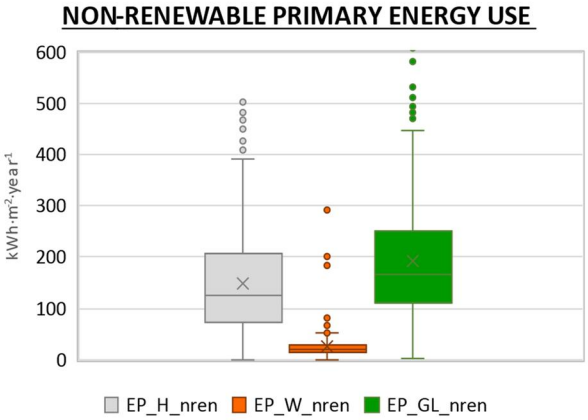
Additional data: other numerical variables that are not included in the archetype

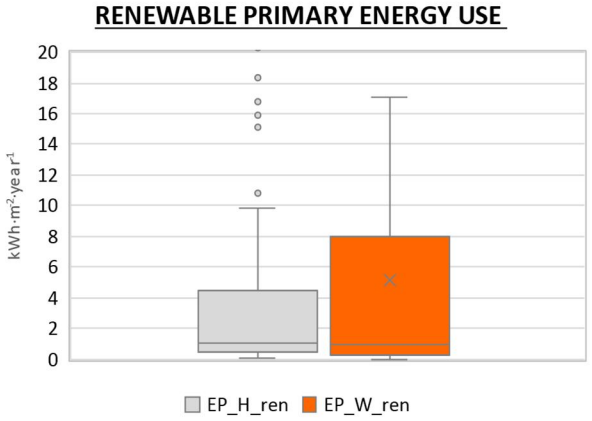












NOTE: Sample size of the analysed data.

Compactness ratio: 386; Window to useful floor area ratio: 83; U-value of the roof: 189; U-value of the wall: 385; U-value of the floor: 83; U-value of the windows: 419; Inter-storey height: 419; Heated net floor area: 419; Heated gross volume: 386; Heated net volume: 386; Total heating power: 135; DHW system power: 252; CO2 Emission: 394; EP_H_nren: 415; EP_W_nren: 355; EP_GL_nren: 416; EP_H_ren: 329; EP_W_ren: 254