Region:	Liguria			**Archetype code:** RES_APPBLOCK_ 1951-1960_F_LIG
Building category:	Residential buildings – Apartments in multi-family block			
Period of construction:	1951-1960			
Climatic zone:	F	**Number of records:**	94	

Description:

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

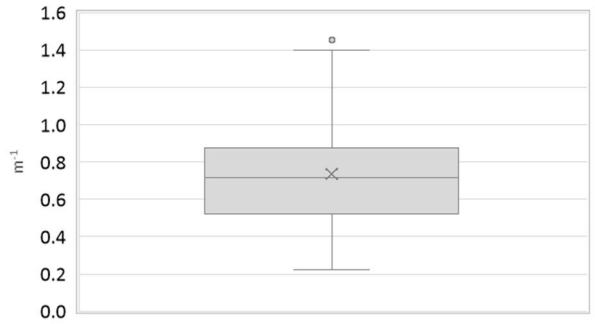
Data sources: EPC databases (100%)

	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}	0.74	0.27	0.52	0.72	0.88
	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	0.02	0.09	0.10	0.12
ENVELOPE	Roof type	-						
	U-value of the roof	$U_{fl;up}$	$W/(m^2 \cdot K)$	-	-	-	-	-
	External walls type	-						
	U-value of the wall	U_{wl}	$W/(m^2 \cdot K)$	1.32	0.61	1.03	1.29	1.61
	Slab on ground floor type	-						
	U-value of the floor	$U_{fl;lw}$	$W/(m^2 \cdot K)$	-	-	-	-	-
	Windows type	-						
	U-value of the windows	U_W	$W/(m^2 \cdot K)$	4.04	1.35	3.20	4.21	5.20
	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: 99%; Autonomous: 1%						
	Heating generator	Unknown: 70%; Traditional boiler: 17%; Fireplace: 9%; Condensing boiler: 4%						
	Daily operating time of the heating system *	No limitations						
	Energy carrier	Unknown: 73%; Electricity and solid biomass: 7%; Natural gas: 6%; Electricity and natural gas: 5%; LPG: 4%; Gas Oil: 3%; Solid biomass: 2%						
	Heating emission sub-system	Unknown: 71%; Radiators: 22%; Air Ducts: 5%; Convectors: 2%						
	Cooling system type	-						
	Daily operating time of the cooling system *	t_C	h	-	-	-	-	-
	Cooling emission sub-system	-						
	DHW system type	-						
	DHW generator	Unknown: 73%; Electric boiler: 19%; Natural gas boiler: 3%; Condensing boiler: 3%; Electric heat pump: 2%						
	* 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_ 1951-1960_F_LIG
Period of construction:	1951-1960			
Climatic zone:	F	**Number of records:**	94	

Numerical variables – GEOMETRY

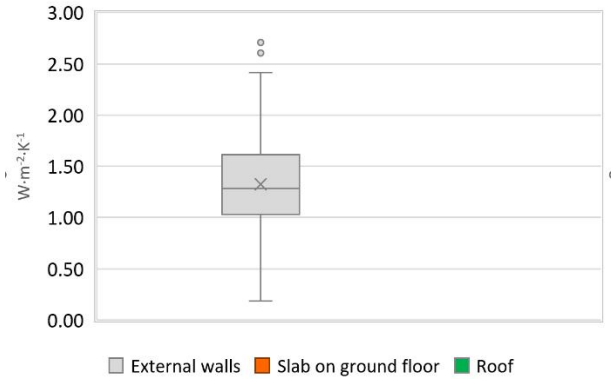
COMPACTNESS RATIO



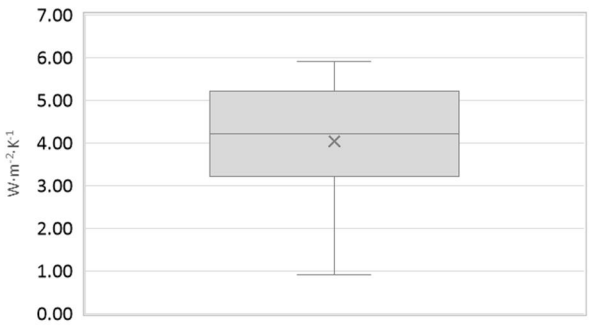
WINDOWS TO WALL RATIO

Numerical variables – ENVELOPE

OPAQUE BUILDING COMPONENTS U-VALUE



WINDOWS U-VALUE



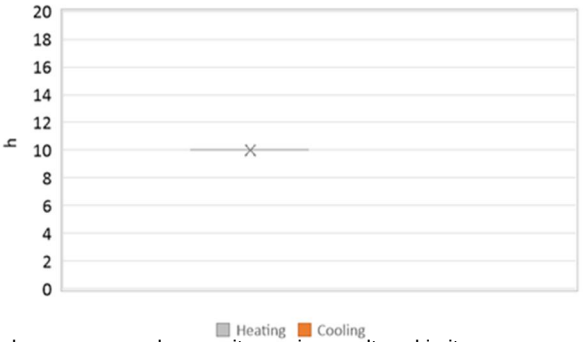
Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE (Standard Values)

AIR EXCHANGE RATE

OCCUPANCY DENSITY

INTERNAL GAINS POWER DENSITY

DAILY OPERATING TIME

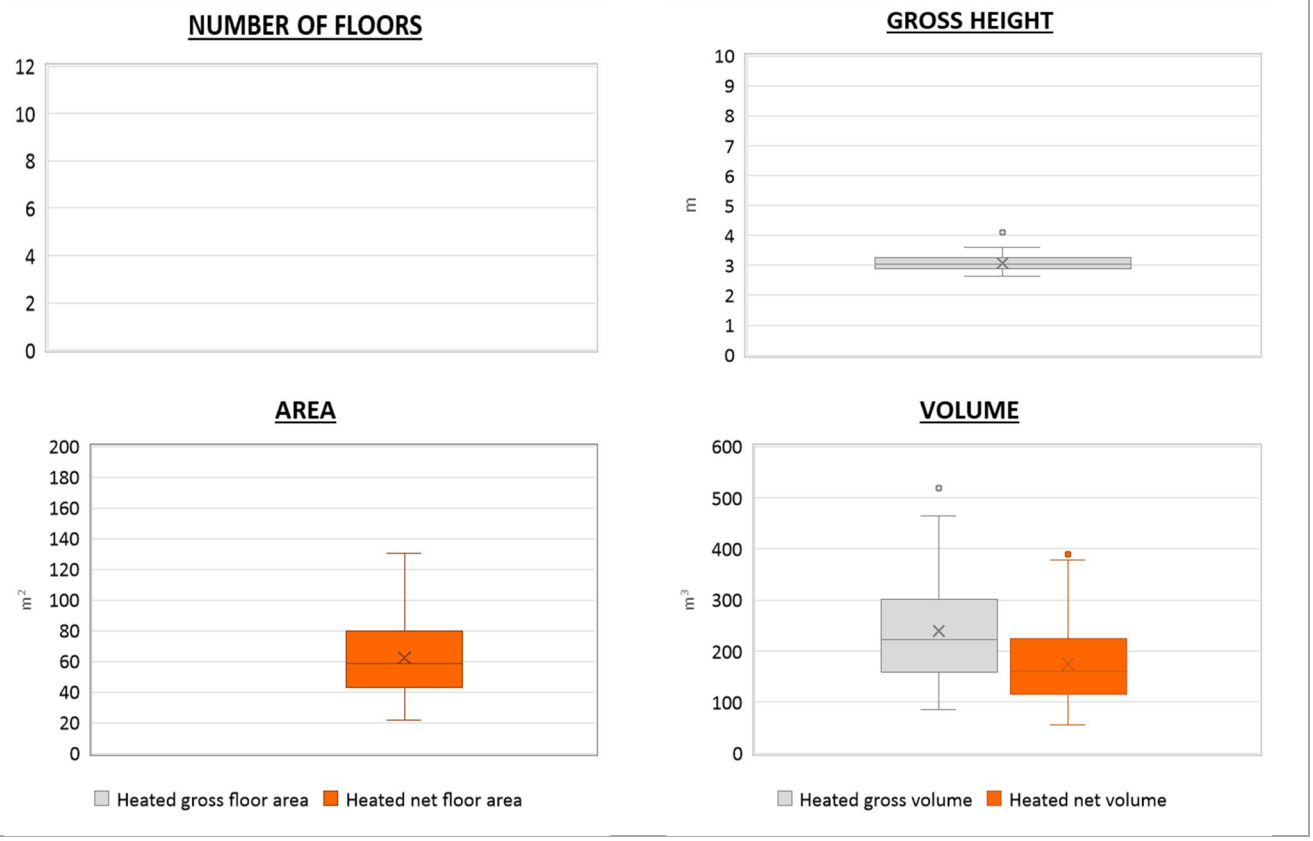


Region:	Liguria			**Archetype code:**
Building category:	Residential buildings – Apartments in multi-family block			RES_APPBLOCK_ 1951-1960_F_LIG
Period of construction:	1951-1960			
Climatic zone:	F	**Number of records:**	94	

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	0.2	2.9	3.1	3.2
	Heated gross floor area	$A_{H;g}$	m²	-	-	-	-	-
	Heated net floor area	$A_{H;n}$	m²	62.4	23.7	42.8	58.6	79.6
	Heated gross volume	$V_{H;g}$	m³	239.6	98.2	158.1	222.6	302.2
	Heated net volume	$V_{H;n}$	m³	174.4	72.6	116.6	161.0	224.4
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	19.3	7.5	14.3	23.9	24.0
	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	13.9	11.7	1.2	17.4	24.4
	* These values refer to the apartment scale							

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

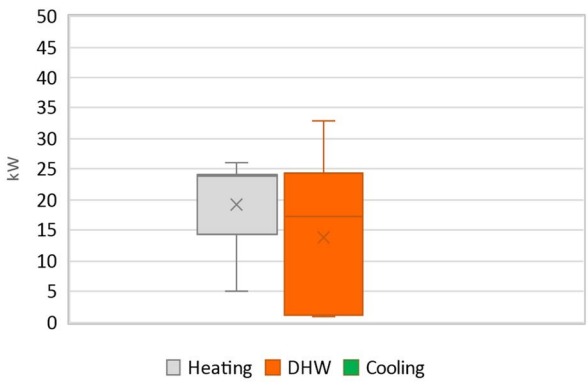


Region:	Liguria			**Archetype code:**
Building category:	Residential buildings – Apartments in multi-family block			RES_APPBLOCK_ 1951-1960_F_LIG
Period of construction:	1951-1960			
Climatic zone:	F	**Number of records:**	94	

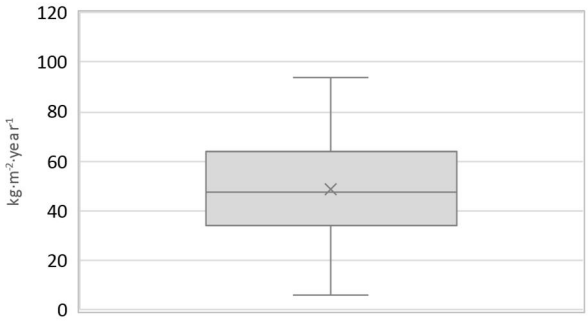
Additional data: other numerical variables that are not included in the archetype

DHW SUPPLY TEMPERATURE

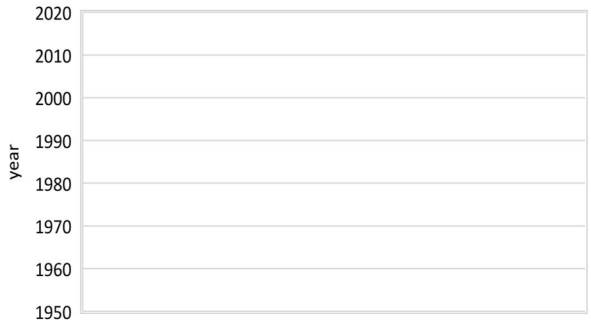
SYSTEM POWER



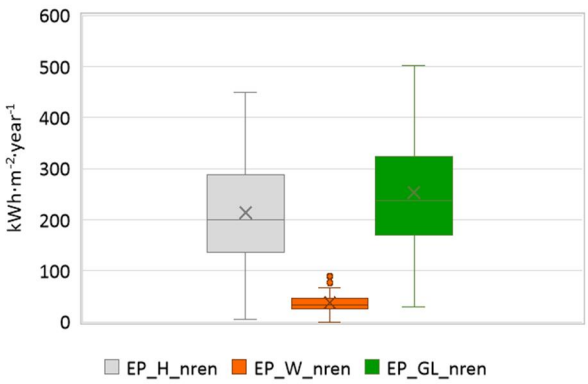
CO_2 EMISSION



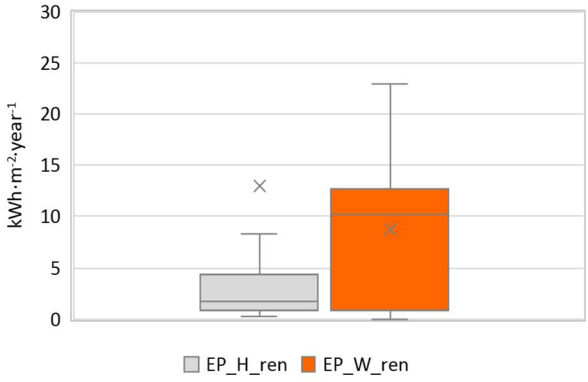
HEATING SYSTEM INSTALLATION YEAR



NON-RENEWABLE PRIMARY ENERGY USE



RENEWABLE PRIMARY ENERGY USE



NOTE: Sample size of the analysed data.

Compactness ratio: 94; Window to useful floor area ratio: 16; U-value of the wall: 90; U-value of the windows: 94; Inter-storey height: 94; Heated net floor area: 94; Heated gross volume: 94; Heated net volume: 94; Total heating power: 16; DHW system power: 44; CO2 Emission: 89; EP_H_nren: 94; EP_W_nren: 91; EP_GL_nren: 94; EP_H_ren: 27; EP_W_ren: 54