Region:	Liguria		Archetype code:
Building category:	Residential buildings – Single family houses		RES_SINGLE_ 1961-1970_C_LIG
Period of construction:	1961-1970		
Climatic zone:	C	Number of records:	3594

Description:	Data sources:
External walls: no data available Roof slabs: no data available	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	-	-	-	-	-
	Heated gross volume	$V_{H;g}$	m³	-	-	-	-	-
	Heated net volume	$V_{H;n}$	m³	-	-	-	-	-
	Compactness ratio	$A_{env}/V_{H;g}$	m⁻¹	0.62	0.32	0.36	0.57	0.77
	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	0.08	0.09	0.10	0.12
ENVELOPE	Roof type		-					
	U-value of the roof	$U_{fl;up}$	W/(m²·K)	1.40	0.63	1.07	1.59	1.73
	External walls type		-					
	U-value of the wall	U_{wl}	W/(m²·K)	1.27	0.41	1.10	1.24	1.40
	Slab on ground floor type		-					
	U-value of the floor	$U_{fl;lw}$	W/(m²·K)	1.52	0.55	1.40	1.52	1.67
	Windows type		-					
	U-value of the windows	U_W	W/(m²·K)	4.04	1.19	3.06	4.34	4.94
	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: 100%				
	Air exchange rate *	n	h⁻¹	0.30	0.00	0.30	0.30	0.30
THERMAL SYSTEMS	Heating system type			Unknown: 95%; Autonomous: 5%				
	Heating generator			Traditional boiler: 44%; Unknown: 40%; Condensing boiler: 11%; Air-source heat pump: 4%; Fireplace: 1%				
	Daily operating time of the heating system *	t_H	h	10	0	10	10	10
	Energy carrier			Natural gas: 45%; Unknown: 39%; Electricity and natural gas: 7%; Electricity: 5%; Gas Oil: 2%; LPG: 1%; Electricity and gas oil: 1%				
	Heating emission sub-system			Radiators: 55%; Unknown: 39%; Fan-coil: 2%; Air Ducts: 2%; Radiant panels: 1%; Convectors: 1%				
	Cooling system type			Unknown: 91%; Heat pump air-air: 7%; Heat pump air-water: 1%; Heat pump water-water: 1%				
	Daily operating time of the cooling system *	t_C	h	-	-	-	-	-
	Cooling emission sub-system			-				
	DHW system type			-				
	DHW generator			Unknown: 64%; Electric boiler: 21%; Condensing boiler: 7%; Electric heat pump: 4%; Natural gas boiler: 4%				
	* 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 – Single family houses	RES_SINGLE_ 1961-1970_C_LIG
Period of construction:	1961-1970	
Climatic zone:	C	Number of records: 3594

Numerical variables – GEOMETRY

COMPACTNESS RATIO

WINDOWS TO WALL RATIO

WWR_N   WWR_S   WWR_E   WWR_W   Awi/Ause
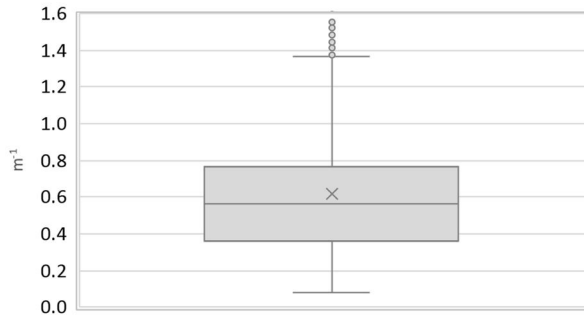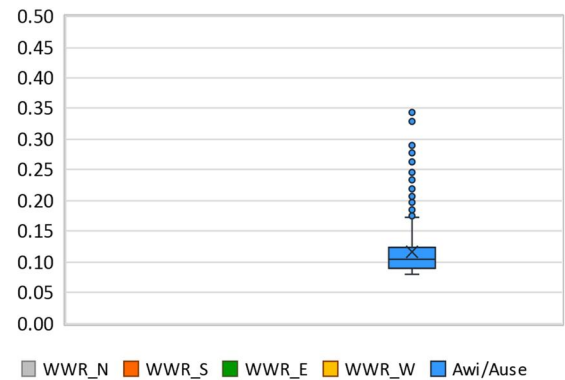
Numerical variables – ENVELOPE

OPAQUE BUILDING COMPONENTS U-VALUE

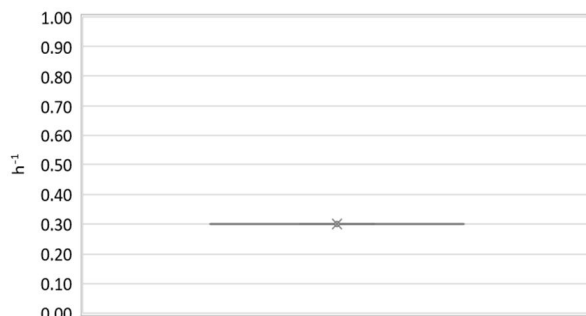External walls   Slab on ground floor   Roof
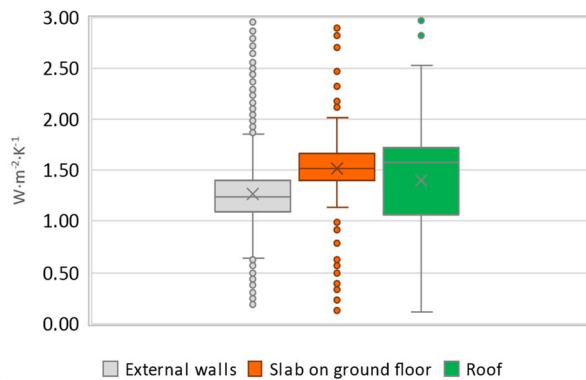
WINDOWS U-VALUE
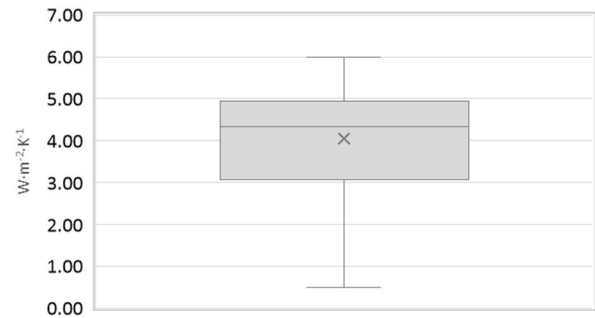
Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE (Standard Values)

AIR EXCHANGE RATE

OCCUPANCY DENSITY

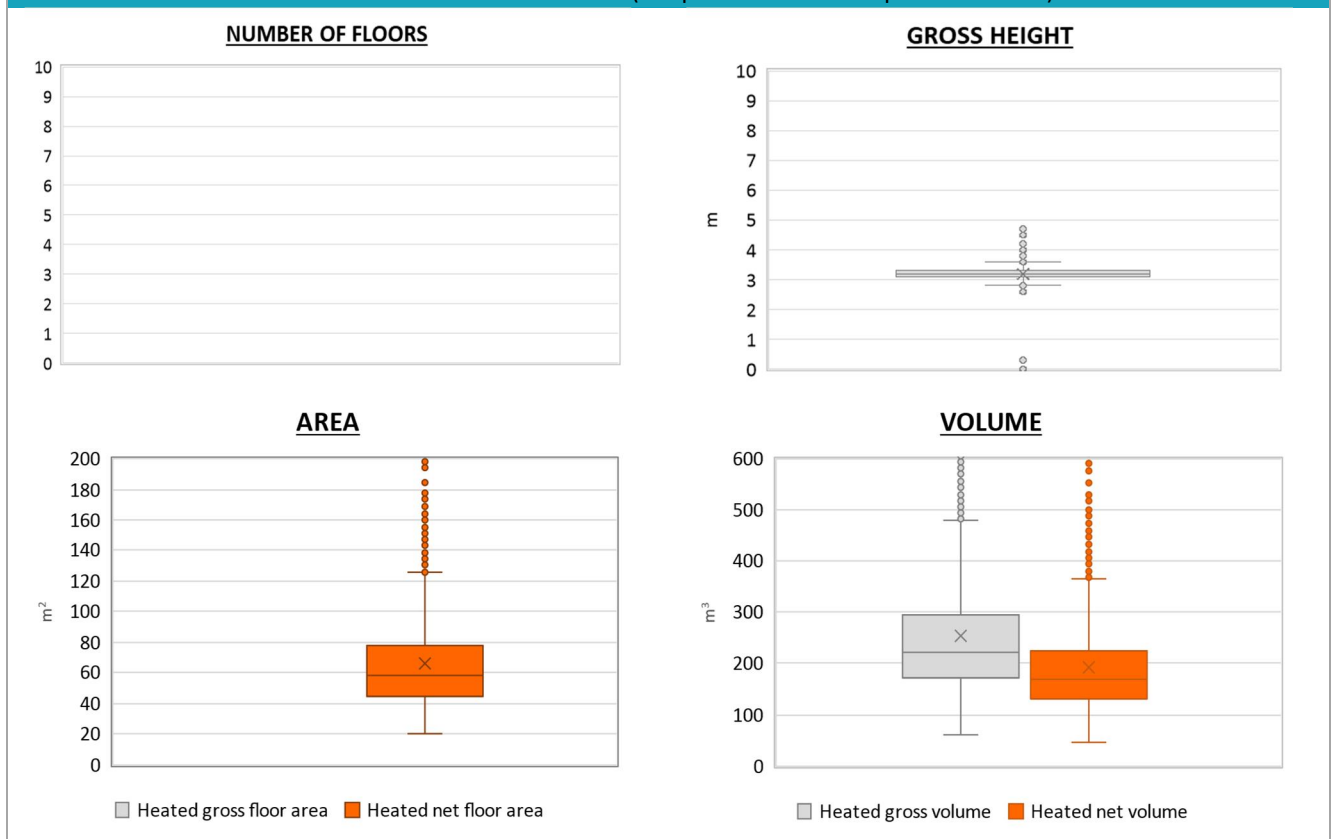### INTERNAL GAINS POWER DENSITY

DAILY OPERATING TIME

Heating   Cooling

Region:	Liguria	Archetype code:
Building category:	Residential buildings – Single family houses	RES_SINGLE_ 1961-1970_C_LIG
Period of construction:	1961-1970	
Climatic zone:	C	Number of records:	3594

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	3.2	0.2	3.1	3.2	3.3
	Heated gross floor area	$A_{H;g}$	m²	-	-	-	-	-
	Heated net floor area	$A_{H;n}$	m²	66.2	36.6	45.0	58.4	77.5
	Heated gross volume	$V_{H;g}$	m³	254.1	144.4	171.7	223.2	295.4
	Heated net volume	$V_{H;n}$	m³	192.1	109.2	129.6	168.5	225.0
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	20.5	7.4	18.0	24.0	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	15.3	11.0	1.2	23.0	24.0
	* These values refer to the apartment scale							

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

NUMBER OF FLOORS

GROSS HEIGHT

AREA

VOLUME

☐ Heated gross floor area   ■ Heated net floor area

☐ Heated gross volume   ■ Heated net volume

Region:	Liguria		Archetype code:
Building category:	Residential buildings – Single family houses		RES_SINGLE_ 1961-1970_C_LIG
Period of construction:	1961-1970		
Climatic zone:	C	Number of records:	3594	

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

DHW SUPPLY TEMPERATURE

SYSTEM POWER

☐ Heating ☐ DHW ☐ Cooling

CO₂ EMISSION

HEATING SYSTEM INSTALLATION YEAR

NON-RENEWABLE PRIMARY ENERGY USE

☐ EP_H_nren ☐ EP_W_nren ☐ EP_GL_nren

RENEWABLE PRIMARY ENERGY USE

☐ EP_H_ren ☐ EP_W_ren
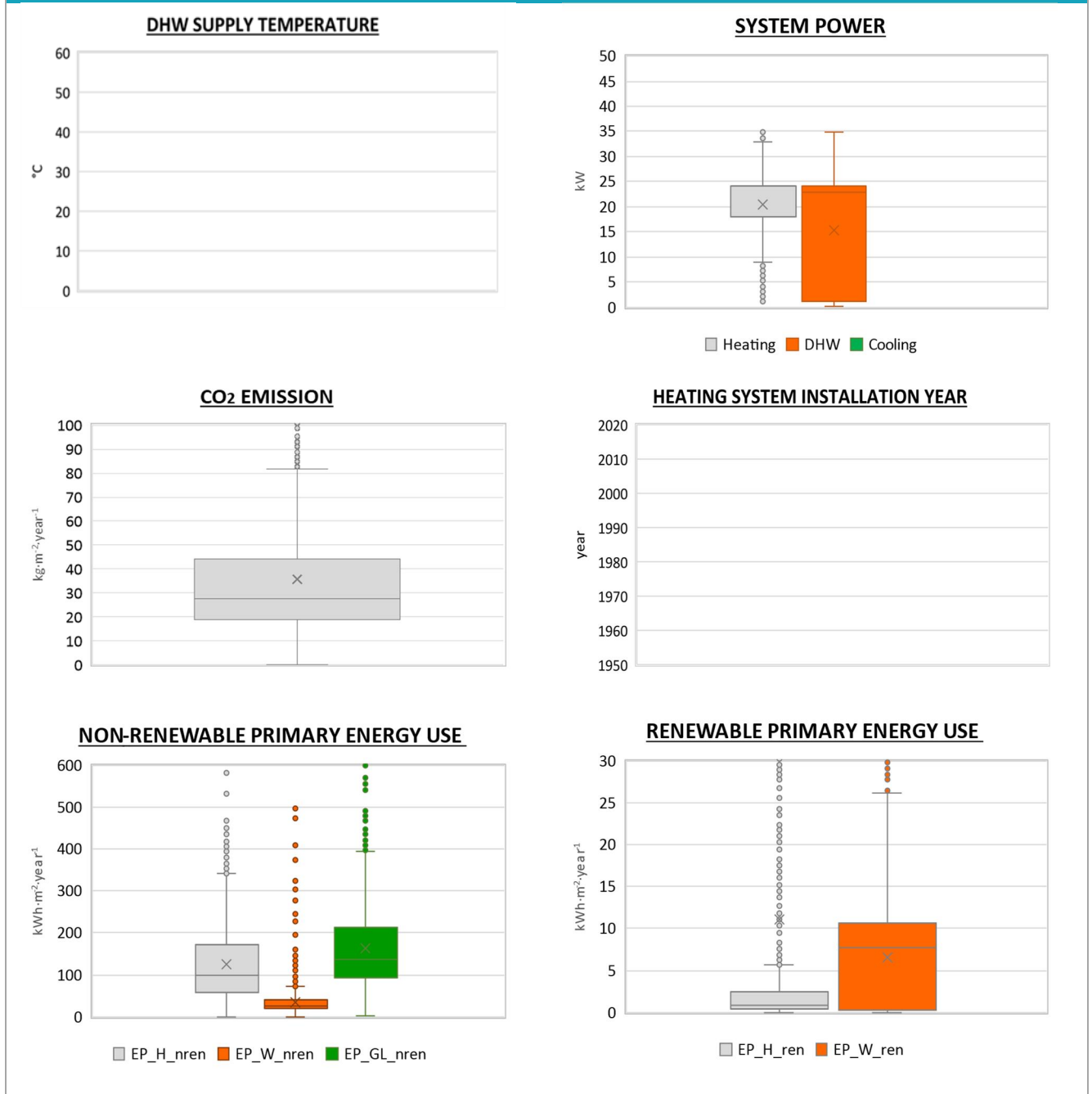
NOTE: Sample size of the analysed data.

Compactness ratio: 3567; Window to useful floor area ratio: 806; U-value of the roof: 497; U-value of the wall: 3034; U-value of the floor: 188; U-value of the windows: 3594; Inter-storey height: 3578; Heated net floor area: 3578; Heated gross volume: 3568; Heated net volume: 3568; Total heating power: 1325; DHW system power: 2495; CO2 Emission: 3547; EP_H_nren: 3576; EP_W_nren: 3458; EP_GL_nren: 3579; EP_H_ren: 2474; EP_W_ren: 2297