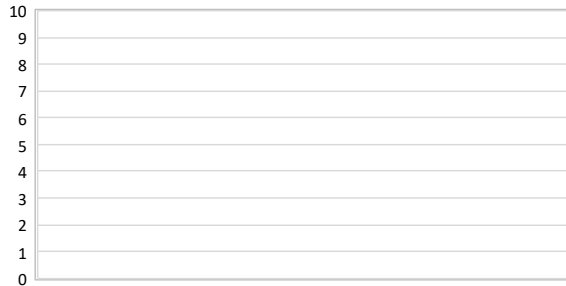


Region:	Piedmont						Archetype code: RES_SINGLE_1941-1950_E_PIE	
Building category:	Residential buildings - Single family houses							
Period of construction:	1941-1950							
Climatic zone:	E	Number of records:				3106		
Description (the codes associated with walls and slabs refer to the structures described in UNI/TR 11552:2014): External walls: solid brick masonry (cod. MLP01). Roof slabs: pitched wooden roof (cod. CIN05).							Data sources: EPC databases (100%)	
	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)
BUILDING GEOMETRY	Number of floors	$n_f$	-	-	-	-	-	-
	Gross height	$H_g$	m	-	-	-	-	-
	Footprint area	$A_{\text{footprint}}$	m <sup>2</sup>	-	-	-	-	-
	Heated gross floor area	$A_{H,g}$	m <sup>2</sup>	-	-	-	-	-
	Heated net floor area	$A_{H,n}$	m <sup>2</sup>	124.1	69.9	79.0	112.2	153.6
	Heated gross volume	$V_{H,g}$	m <sup>3</sup>	513.4	308.7	322.3	465.5	634.5
	Heated net volume	$V_{H,n}$	m <sup>3</sup>	-	-	-	-	-
	Compactness ratio	$A_{\text{env}}/V_{H,g}$	m <sup>-1</sup>	0.78	0.24	0.65	0.77	0.90
	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	$A_{wi}/A_{\text{use}}$	-	0.16	0.07	0.12	0.15	0.19
ENVELOPE	Roof type	-						
	U-value of the roof	$U_{f,up}$	W/(m <sup>2</sup> ·K)	-	-	-	-	-
	External walls type	Solid Brick masonry: 80%; Hollow brick masonry: 16%; Unknown: 4%						
	U-value of the wall	$U_{wl}$	W/(m <sup>2</sup> ·K)	-	-	-	-	-
	Slab on ground floor type	-						
	U-value of the floor	$U_{f,lw}$	W/(m <sup>2</sup> ·K)	-	-	-	-	-
	Windows type	-						
	U-value of the windows	$U_W$	W/(m <sup>2</sup> ·K)	3.06	1.30	1.96	2.97	4.23
GAINS and VENTILATION	Shading system type	-						
	Occupancy density *	$O_C$	person/m <sup>2</sup>	UNI EN 16798-1 - Table A.19				
	Lighting power density *	$W_L$	W/m <sup>2</sup>	UNI EN 16798-1 - A.8.3				
	Equipment power density *	$W_A$	W/m <sup>2</sup>	UNI EN 16798-1 - A.8.3				
	Type of ventilation	Natural: 100%						
THERMAL SYSTEMS	Air exchange rate *	$n$	h <sup>-1</sup>	0.30	0.00	0.30	0.30	0.30
	Heating system type	Autonomous: 100%						
	Heating generator	-						
	Daily operating time of the heating system *	$t_H$	h	14.00	0.00	14.00	14.00	14.00
	Energy carrier	Natural Gas: 85%; Electricity: 6%; Solid biomass: 3%; LPG: 2%; District heating: 2%; Gas Oil: 2%						
	Heating emission sub-system	-						
	Cooling system type	-						
	Daily operating time of the cooling system *	$t_C$	h	-	-	-	-	-
	Cooling emission sub-system	-						
	DHW system type	Autonomous, coupled with heating: 68%; Autonomous, detached from heating: 19%; Centralized, coupled with heating: 12%; Centralized, detached from heating: 1%						
	DHW generator	-						
* These values are derived from UNI EN ISO Standards								

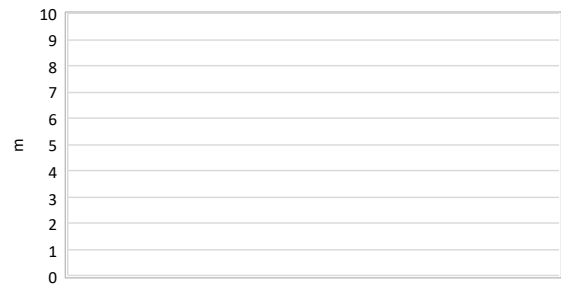
Region:	Piedmont	Archetype code: RES_SINGLE_1941- 1950_E_PIE
Building category:	Residential buildings - Single family houses	
Period of construction:	1941-1950	
Climatic zone:	E	
Number of records:		3106

### Numerical variables – GEOMETRY

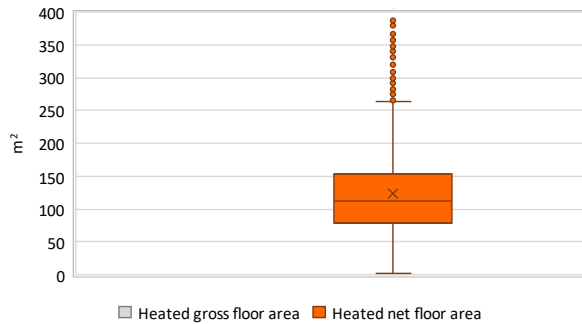
**NUMBER OF FLOORS**



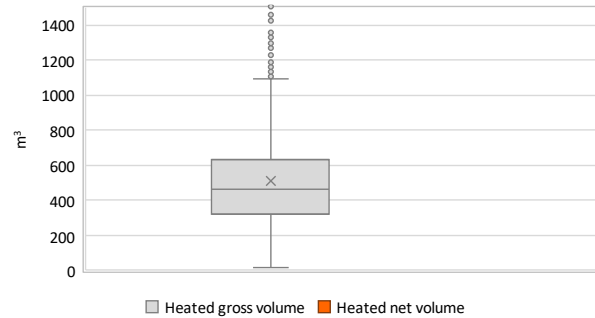
**GROSS HEIGHT**



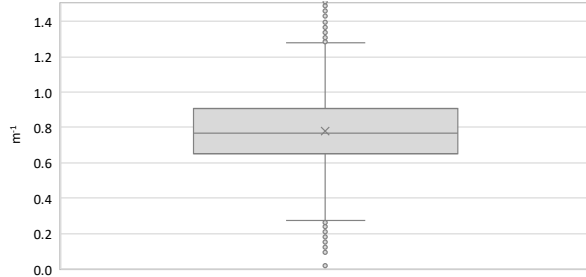
**AREA**



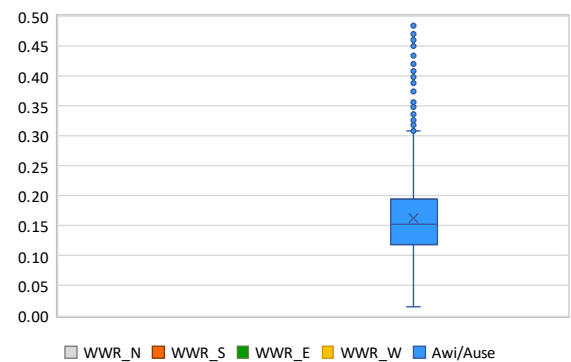
**VOLUME**



**COMPACTNESS RATIO**



**WINDOWS TO WALL RATIO**

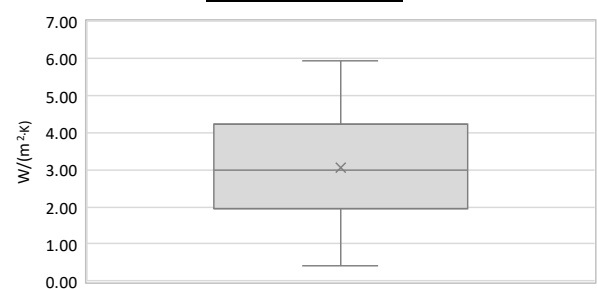


### Numerical variables – ENVELOPE

**OPAQUE BUILDING COMPONENTS U-VALUE**



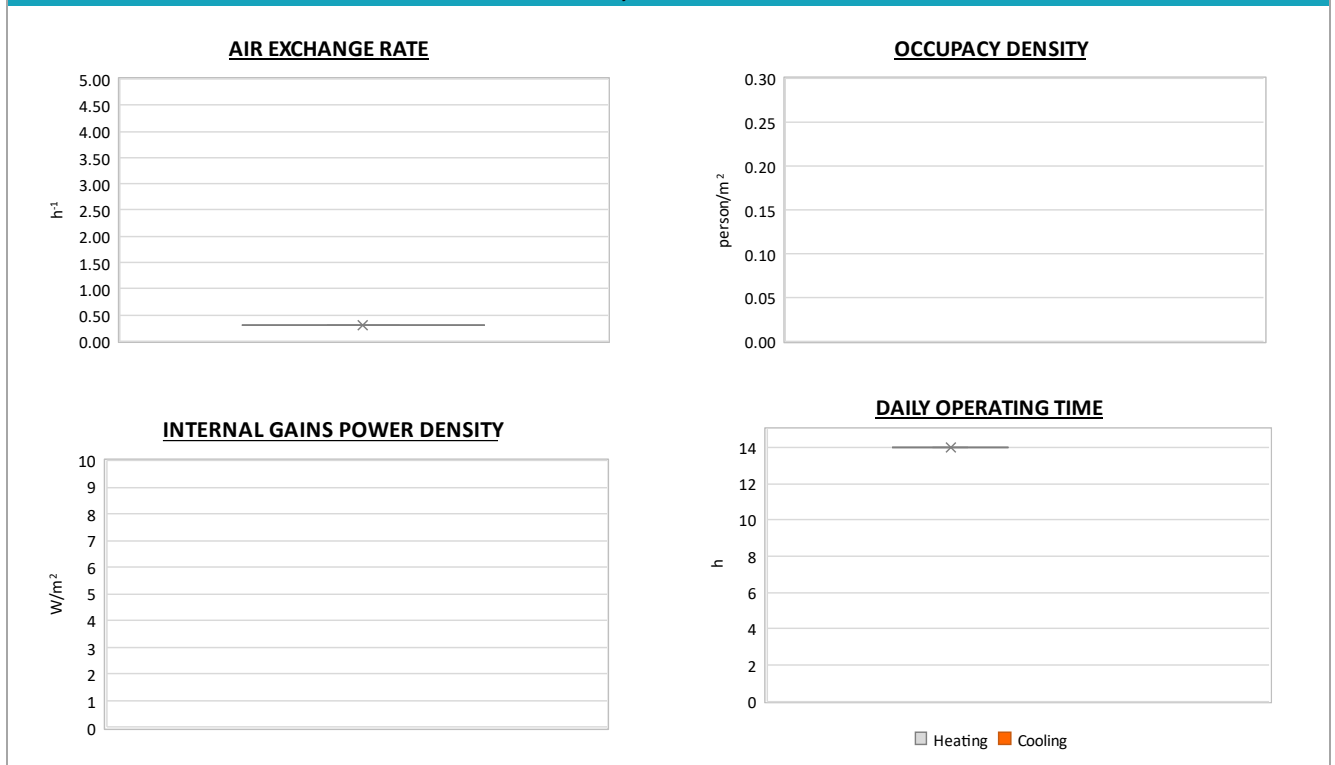
**WINDOWS U-VALUE**



Region:	Piedmont	Archetype code: RES_SINGLE_1941- 1950_E_PIE
Building category:	Residential buildings - Single family houses	
Period of construction:	1941-1950	
Climatic zone:	E	
Number of records:		3106

ADDITIONAL DATA								
	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)
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	28.3	52.4	23.6	24.6	29.0
	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	19.2	179.6	3.4	5.0	7.8
	Temperature of DHW	$\vartheta_w$	°C	40.0	0.0	40.0	40.0	40.0
	DHW system power	$P_{W,gen}$	kW	27.6	146.5	21.0	24.0	28.0

### Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE



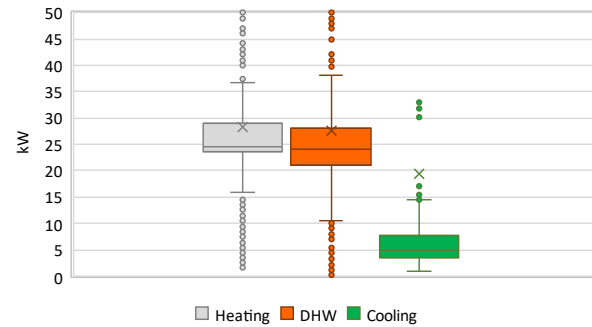
Region:	Piedmont	Archetype code: RES_SINGLE_1941- 1950_E_PIE
Building category:	Residential buildings - Single family houses	
Period of construction:	1941-1950	
Climatic zone:	E	
Number of records:		3106

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

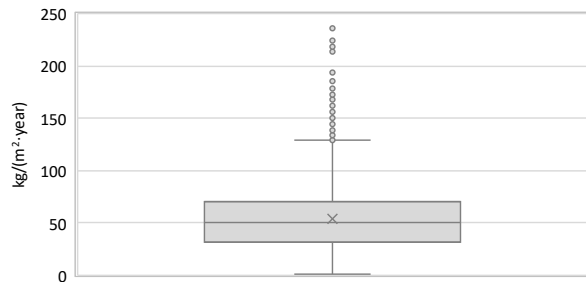
**DHW SUPPLY TEMPERATURE**



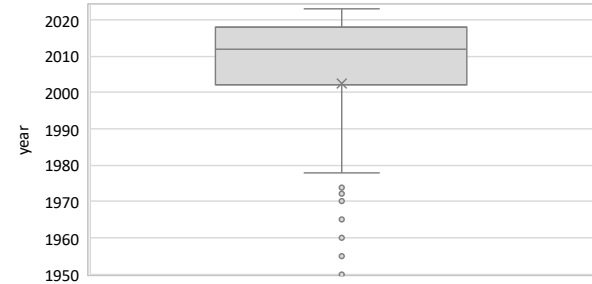
**SYSTEM POWER**



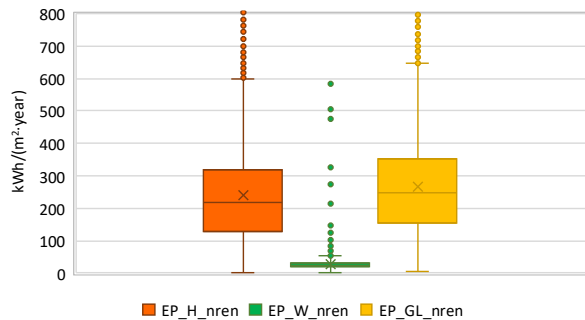
**CO<sub>2</sub> EMISSION**



**HEATING SYSTEM INSTALLATION YEAR**



**NON-RENEWABLE PRIMARY ENERGY USE**



**RENEWABLE PRIMARY ENERGY USE**

