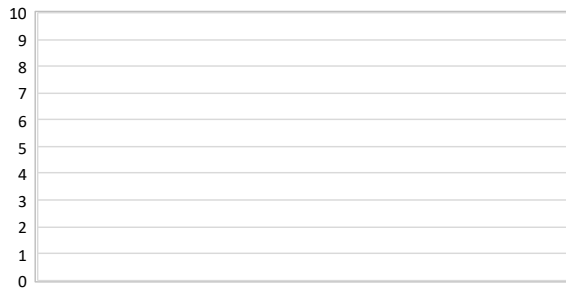


Region:	Piedmont						Archetype code: RES_SINGLE_1931-1940_E_PIE	
Building category:	Residential buildings - Single family houses							
Period of construction:	1931-1940							
Climatic zone:	E	Number of records:				3017		
Description (the codes associated with walls and slabs refer to the structures 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 ²	-	-	-	-	-
	Heated gross floor area	$A_{H,g}$	m ²	-	-	-	-	-
	Heated net floor area	$A_{H,n}$	m ²	124.8	72.5	80.0	111.4	155.0
	Heated gross volume	$V_{H,g}$	m ³	514.9	300.4	325.4	457.1	630.6
	Heated net volume	$V_{H,n}$	m ³	-	-	-	-	-
	Compactness ratio	$A_{\text{env}}/V_{H,g}$	m ⁻¹	0.76	0.21	0.64	0.75	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}	-	0.16	0.07	0.11	0.15	0.19
ENVELOPE	Roof type	-						
	U-value of the roof	$U_{\text{fl;up}}$	W/(m ² ·K)	-	-	-	-	-
	External walls type	Solid Brick masonry: 85%; Hollow brick masonry: 9%; Unknown: 6%						
	U-value of the wall	U_{wl}	W/(m ² ·K)	-	-	-	-	-
	Slab on ground floor type	-						
	U-value of the floor	$U_{\text{fl;lw}}$	W/(m ² ·K)	-	-	-	-	-
	Windows type	-						
	U-value of the windows	U_W	W/(m ² ·K)	3.17	1.31	2.08	3.09	4.31
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	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: 3%; Gas Oil: 2%; District heating: 1%						
	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: 62%; Autonomous, detached from heating: 20%; Centralized, coupled with heating: 17%; Centralized, detached from heating: 1%						
	DHW generator	-						
	* These values are derived from UNI EN ISO Standards							

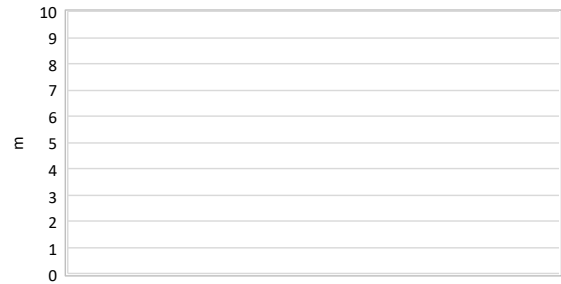
Region:	Piedmont	Archetype code: RES_SINGLE_1931- 1940_E_PIE
Building category:	Residential buildings - Single family houses	
Period of construction:	1931-1940	
Climatic zone:	E	
Number of records:		3017

Numerical variables – GEOMETRY

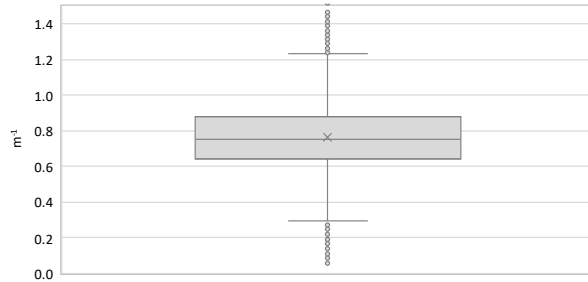
NUMBER OF FLOORS



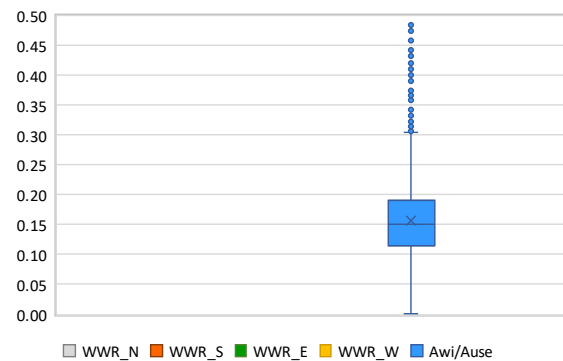
GROSS HEIGHT



COMPACTNESS RATIO



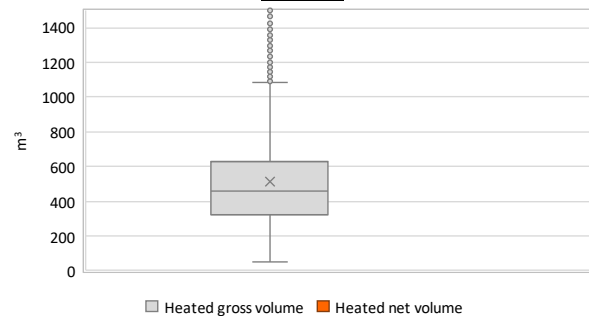
WINDOWS TO WALL RATIO



AREA



VOLUME

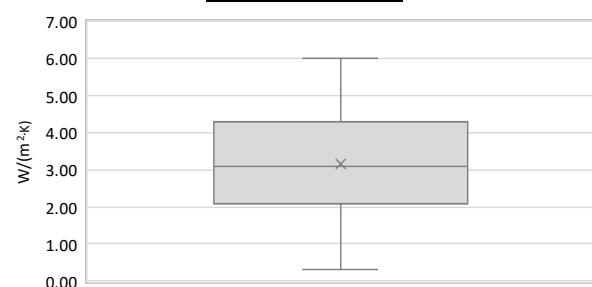


Numerical variables – ENVELOPE

OPAQUE BUILDING COMPONENTS U-VALUE



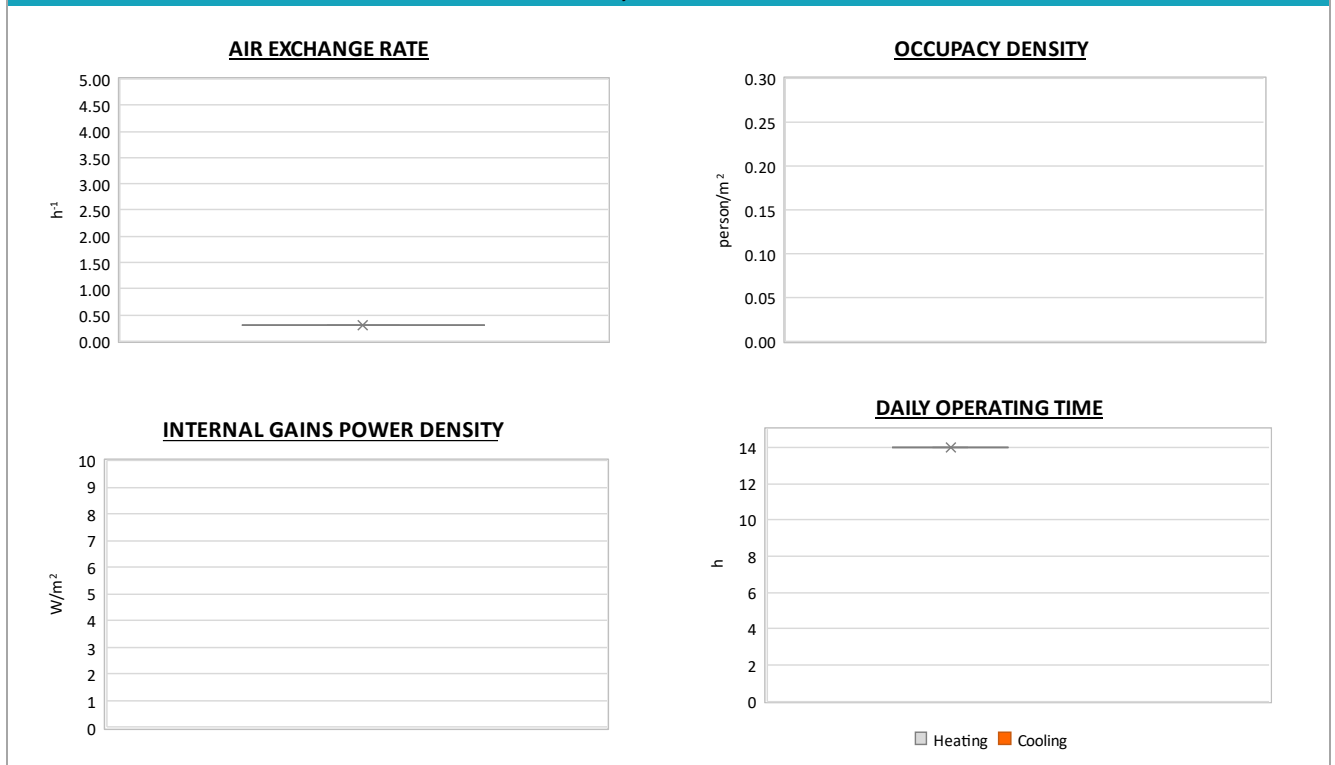
WINDOWS U-VALUE



Region:	Piedmont	Archetype code: RES_SINGLE_1931- 1940_E_PIE
Building category:	Residential buildings - Single family houses	
Period of construction:	1931-1940	
Climatic zone:	E	
Number of records:		3017

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	27.4	72.1	23.3	24.4	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	9.4	41.8	3.0	5.0	7.9
	Temperature of DHW	ϑ_W	°C	40.0	0.0	40.0	40.0	40.0
	DHW system power	$P_{W,gen}$	kW	25.7	83.8	20.0	24.0	28.0

Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE



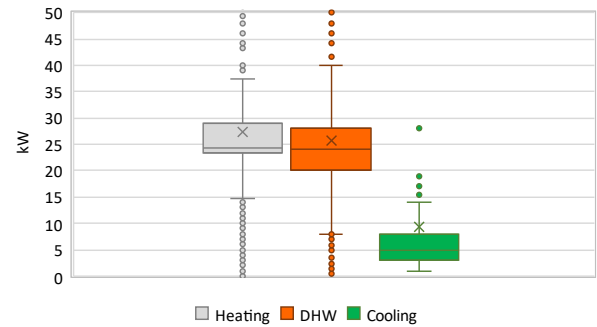
Region:	Piedmont	Archetype code: RES_SINGLE_1931- 1940_E_PIE
Building category:	Residential buildings - Single family houses	
Period of construction:	1931-1940	
Climatic zone:	E	
Number of records:		3017

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

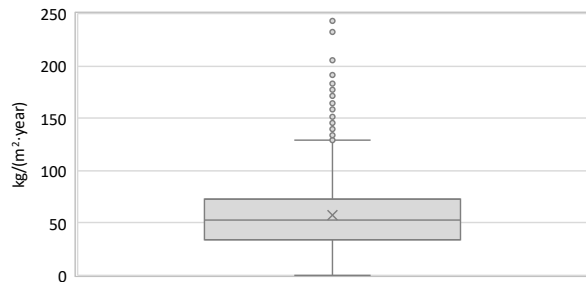
DHW SUPPLY TEMPERATURE



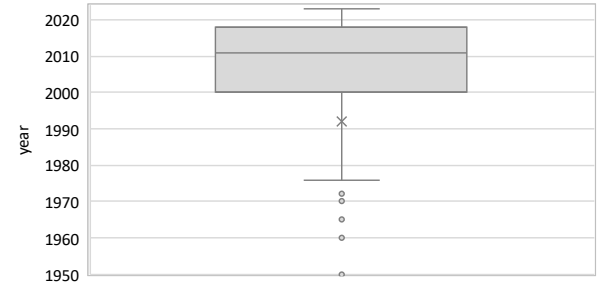
SYSTEM POWER



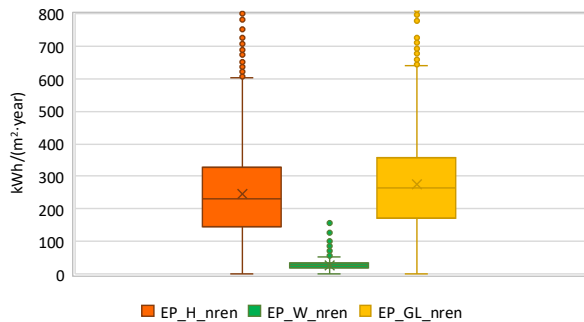
CO₂ EMISSION



HEATING SYSTEM INSTALLATION YEAR



NON-RENEWABLE PRIMARY ENERGY USE



RENEWABLE PRIMARY ENERGY USE

