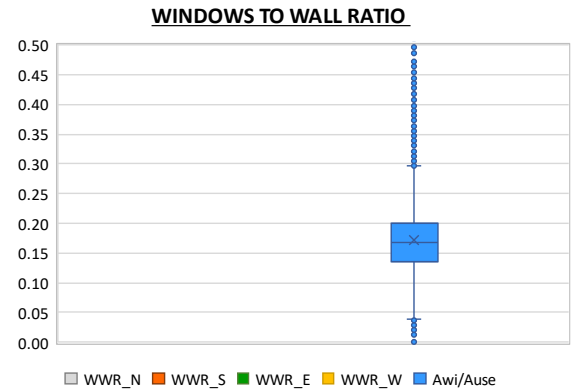
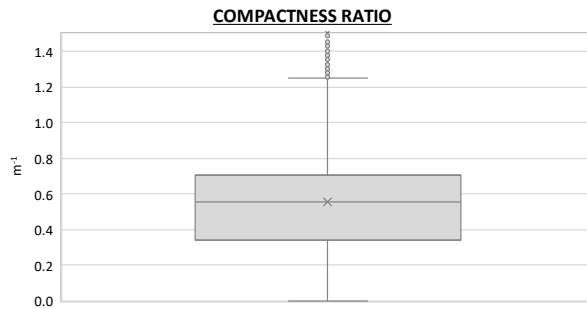


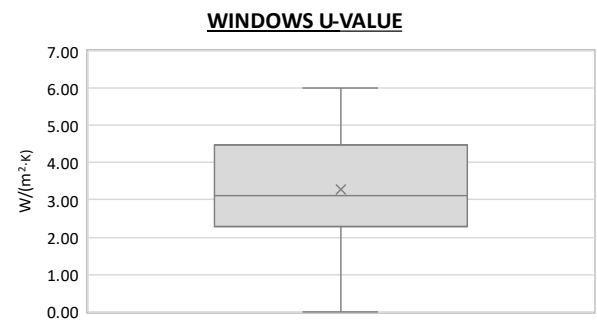
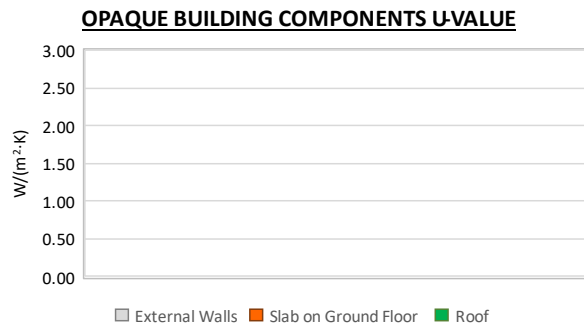
Region:	Piedmont					Archetype code: RES_APPBLOCK_1971-1980_E_PIE		
Building category:	Residential buildings - Apartments (in multifamily blocks)							
Period of construction:	1971-1980							
Climatic zone:	E	Number of records:		33754				
Description (the codes associated with walls and slabs refer to the structures described in UNI/TR 11552:2014): External walls: hollow brick masonry with thermal insulation (cod. MCV02). Roof slabs: reinforced concrete floor slab (cod. SOL04).						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	-	-	-	-	-
	Heated gross volume	$V_{H,g}$	m ³	-	-	-	-	-
	Heated net volume	$V_{H,n}$	m ³	-	-	-	-	-
	Compactness ratio	$A_{\text{env}}/V_{H,g}$	m ⁻¹	0.56	1.06	0.34	0.56	0.71
	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}	-	0.17	0.06	0.14	0.17	0.20
ENVELOPE	Roof type	-						
	U-value of the roof	$U_{fi,up}$	W/(m ² ·K)	-	-	-	-	-
	External walls type	Hollow brick masonry: 79%; Solid Brick masonry: 17%; Unknown: 2%; Prefabricated panels: 1%						
	U-value of the wall	U_{wl}	W/(m ² ·K)	-	-	-	-	-
	Slab on ground floor type	-						
	U-value of the floor	$U_{fi,lw}$	W/(m ² ·K)	-	-	-	-	-
	Windows type	-						
	U-value of the windows	U_W	W/(m ² ·K)	3.28	1.29	2.28	3.10	4.49
GAINS and VENTILATION	Shading system type	-						
	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%						
THERMAL SYSTEMS	Air exchange rate *	n	h ⁻¹	0.30	0.00	0.30	0.30	0.30
	Heating system type	Centralized: 57%; Autonomous: 43%						
	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: 80%; Electricity: 7%; District heating: 5%; Solid biomass: 4%; LPG: 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, detached from heating: 38%; Autonomous, coupled with heating: 36%; Centralized, coupled with heating: 19%; Centralized, detached from heating: 7%						
	DHW generator	-						
	* These values are derived from UNI EN ISO Standards							

Region:	Piedmont	Archetype code: RES_APPBLOCK_1971- 1980_E_PIE
Building category:	Residential buildings - Apartments (in multifamily blocks)	
Period of construction:	1971-1980	
Climatic zone:	E	
Number of records:		33754

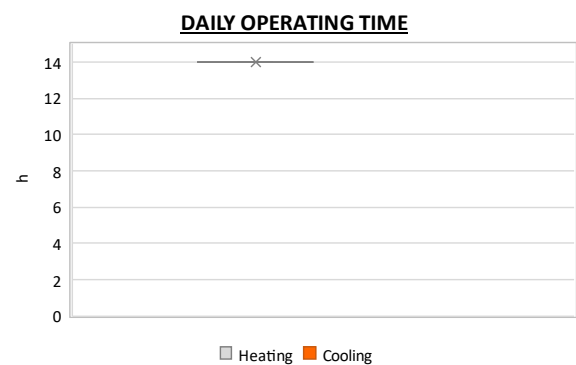
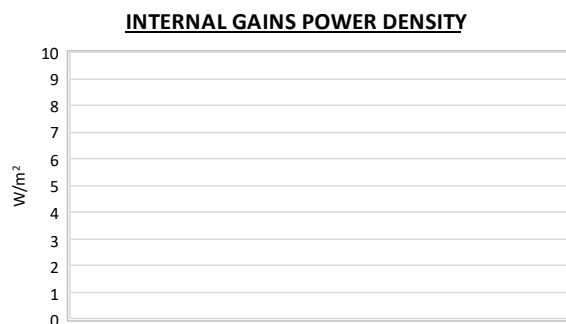
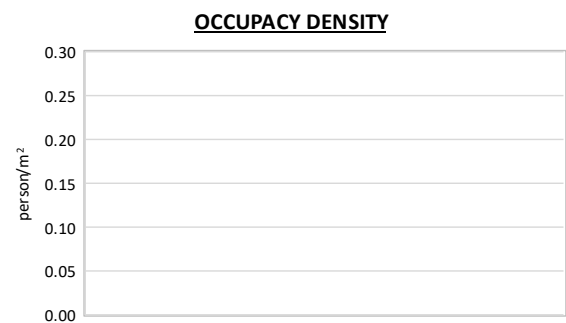
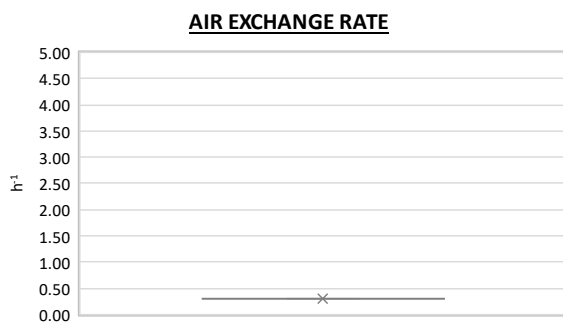
Numerical variables – GEOMETRY



Numerical variables – ENVELOPE



Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE

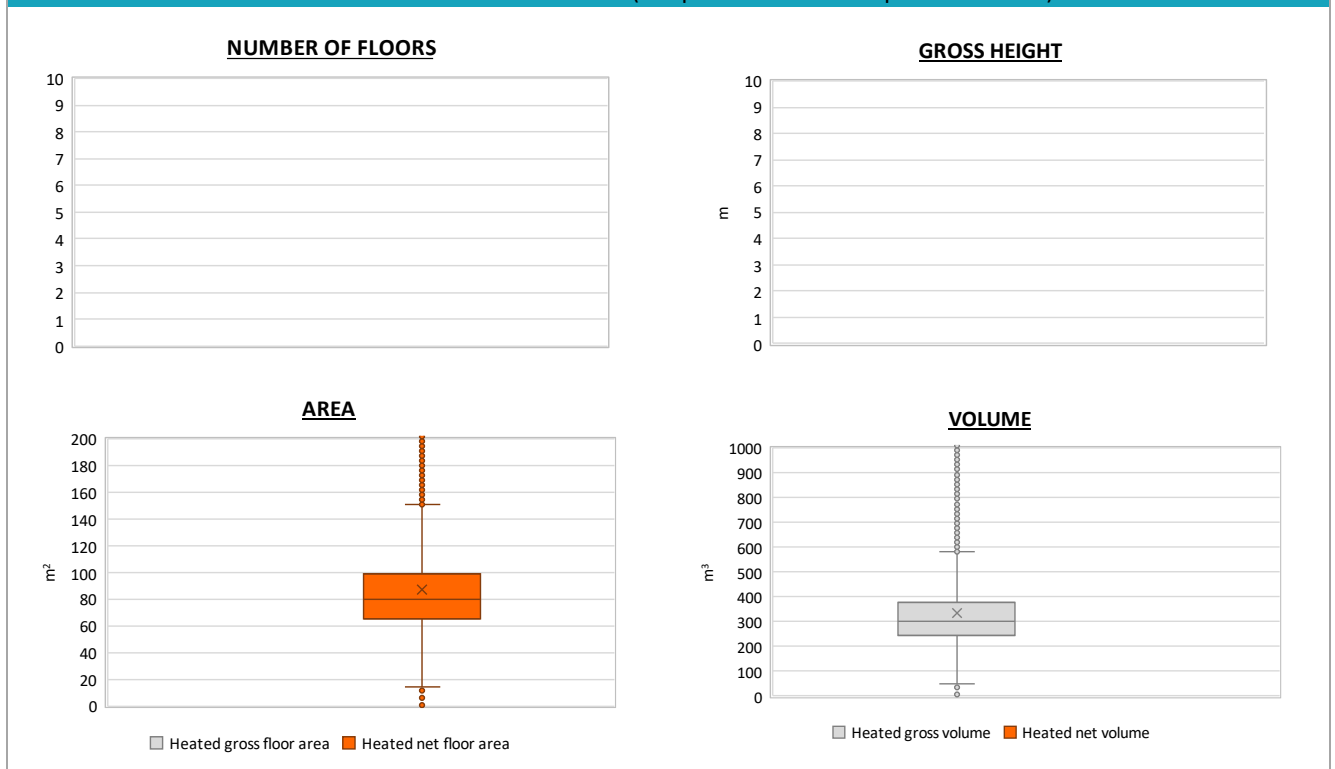


Region:	Piedmont			Archetype code: RES_APPBLOCK_1971- 1980_E_PIE
Building category:	Residential buildings - Apartments (in multifamily blocks)			
Period of construction:	1971-1980			
Climatic zone:	E	Number of records:	33754	

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	-	-	-	-	-
	Heated gross floor area	$A_{H,g}$	m ²	-	-	-	-	-
	Heated net floor area	$A_{H,n}$	m ²	87.1	40.5	64.9	80.0	99.1
	Heated gross volume	$V_{H,g}$	m ³	333.9	167.7	244.4	303.6	379.1
	Heated net volume	$V_{H,n}$	m ³	-	-	-	-	-
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	24.4	6.1	23.6	24.0	28.0
	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	5.0	3.6	3.0	3.8	6.0
	Temperature of DHW	ϑ_W	°C	40.0	0.0	40.0	40.0	40.0
	DHW system power *	$P_{W,gen}$	kW	18.6	10.1	12.0	23.1	24.5

* These values refer to the apartment scale

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



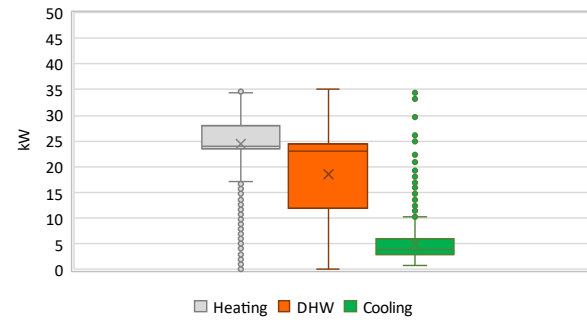
Region:	Piedmont	Archetype code: RES_APPBLOCK_1971- 1980_E_PIE
Building category:	Residential buildings - Apartments (in multifamily blocks)	
Period of construction:	1971-1980	
Climatic zone:	E	
Number of records:		33754

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

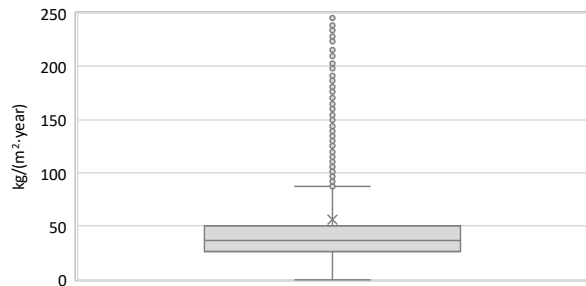
DHW SUPPLY TEMPERATURE



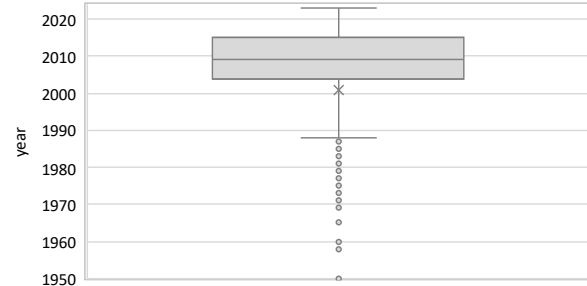
SYSTEM POWER



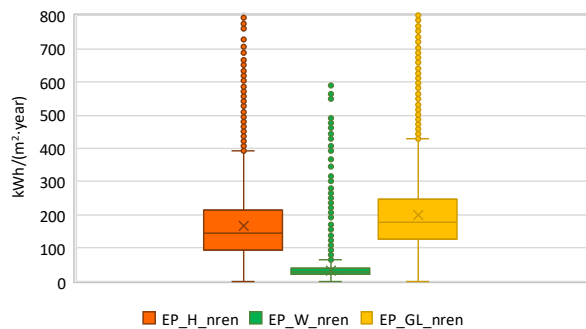
CO₂ EMISSION



HEATING SYSTEM INSTALLATION YEAR



NON-RENEWABLE PRIMARY ENERGY USE



RENEWABLE PRIMARY ENERGY USE

