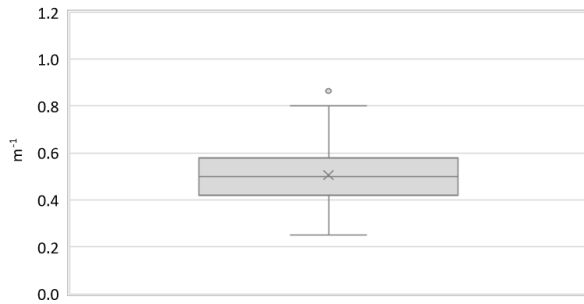


Region:	Trentino Alto Adige						Archetype code: RES_APPBLOCK_ -1930_E_TN	
Building category:	Residential buildings – Apartments (in multifamily blocks)							
Period of construction:	<1930							
Climatic zone:	E	Number of records:				4107		
Description (the codes associated with walls and slabs refer to the structures described in UNI/TR 11552:2014): External walls: no data available Roof slabs: no data available							Data sources: APE (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	830	953	370	483	737
	Heated gross volume	$V_{H,g}$	m ³	-	-	-	-	-
	Heated net volume	$V_{H,n}$	m ³	3631	4492	1557	2087	3259
	Compactness ratio	$A_{\text{env}}/V_{H,g}$	m ⁻¹	0.51	0.13	0.43	0.50	0.58
	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}	-	-	-	-	-	-
	ENVELOPE	Roof type	-					
U-value of the roof		$U_{\text{fi;up}}$	W/(m ² ·K)	-	-	-	-	-
External walls type		-						
U-value of the wall		U_{wl}	W/(m ² ·K)	-	-	-	-	-
Slab on ground floor type		-						
U-value of the floor		$U_{\text{fi;lw}}$	W/(m ² ·K)	-	-	-	-	-
Windows type		-						
U-value of the windows		U_{W}	W/(m ² ·K)	-	-	-	-	-
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: 54%, Centralized: 14%, Unknown: 32%						
	Heating generator	Traditional boiler: 14%; Air source heat pump: 3%, Condensing boiler: 9%, Boiler (unknown type): 68%, DHC: 1%, Unknown: 5%						
	Daily operating time of the heating system *	t_{H}	h	14	0	14	14	14
	Energy carrier	Natural gas: 95%, Electricity: 1%, Gas Oil: 2%, Solid biomass: 1%, LPG: 1%						
	Heating emission sub-system	-						
	Cooling system type	Air-cooled chiller: 2%, Unknown: 98%						
	Daily operating time of the cooling system *	t_{C}	h	0	0	0	0	0
	Cooling emission sub-system	-						
	DHW system type	Autonomous – coupled with heating: 59%, Autonomous - detached from heating: 9%, Centralized – coupled with heating: 11%, Unknown: 21%						
	DHW generator	Natural gas boiler: 70%, Electric boiler: 2%, Electric Heat Pump: 7%, Unknown: 21%						
	* These values were not available in the considered sources, and are thus derived from UNI EN Standards							

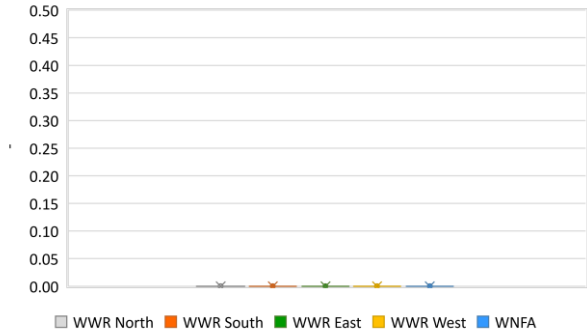
Region:	Trentino Alto Adige	Archetype code: RES_APPBLOCK_ -1930_E_TN
Building category:	Residential buildings – Apartments (in multifamily blocks)	
Period of construction:	<1930	
Climatic zone:	E	
Number of records:		4107 apts 87 buildings

Numerical variables – GEOMETRY

COMPACTNESS RATIO

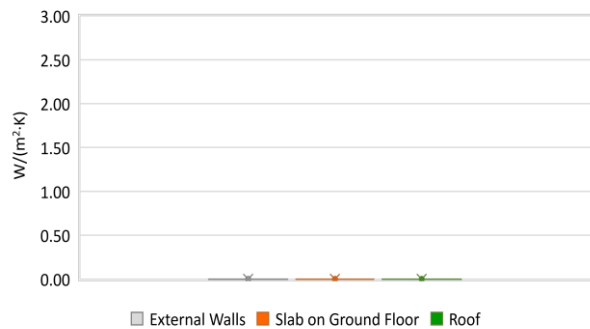


WINDOWS TO WALL RATIO



Numerical variables – ENVELOPE

OPAQUE BUILDING COMPONENTS U-VALUE

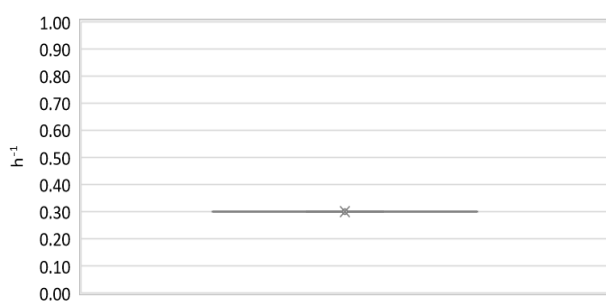


WINDOWS U-VALUE



Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE

AIR EXCHANGE RATE



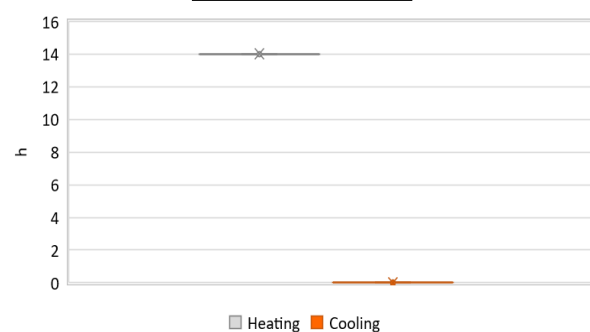
OCCUPANCY DENSITY



INTERNAL GAINS POWER DENSITY



DAILY OPERATING TIME



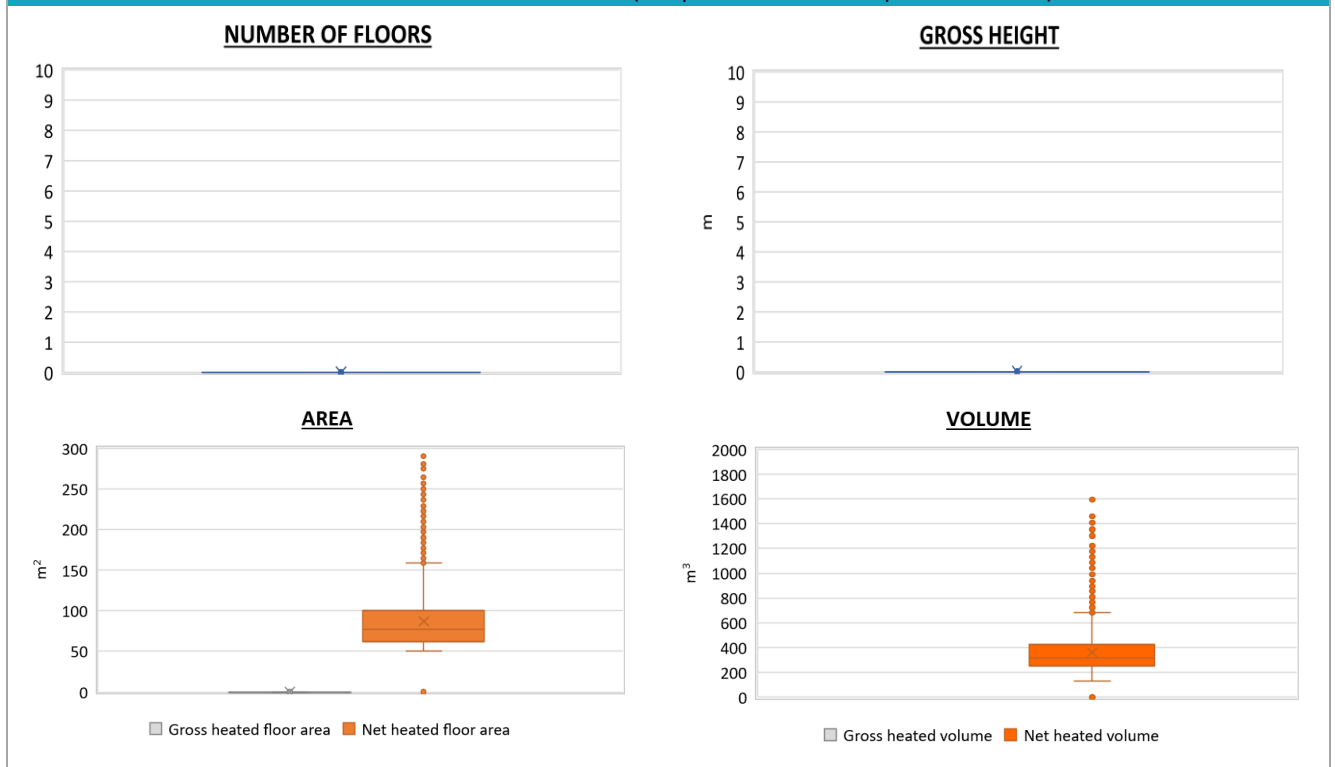
The data can be used for analysis, modeling, and research purposes, as long as it remains unaltered in its original form. Users are free to publish results based on the data, provided they credit the original source.

Region:	Trentino Alto Adige			Archetype code: RES_APPBLOCK_ -1930_E_TN
Building category:	Residential buildings – Apartments (in multifamily blocks)			
Period of construction:	<1930			
Climatic zone:	E	Number of records:	4107	

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	89	38	63	78	102
	Heated gross volume	$V_{H,g}$	m ³	-	-	-	-	-
	Heated net volume	$V_{H,n}$	m ³	370	168	260	323	428
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	34	77	24	25	29
	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	15	31	4	6	14
	Temperature of DHW	ϑ_W	°C	40	0	40	40	40
	DHW system power *	$P_{W,gen}$	kW	34	77	24	25	29

* These values refer to the apartment scale

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



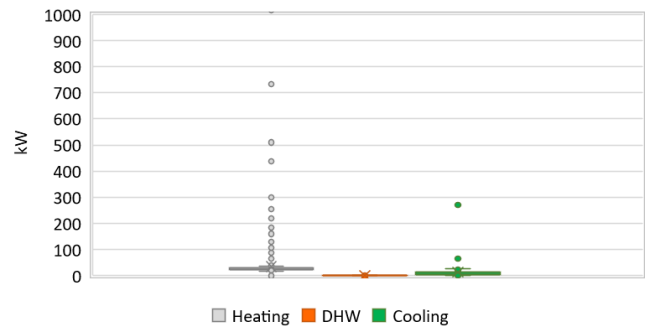
Region:	Trentino Alto Adige			Archetype code: RES_APPBLOCK_ -1930_E_TN
Building category:	Residential buildings – Apartments (in multifamily blocks)			
Period of construction:	<1930			
Climatic zone:	E	Number of records:	4107 apts 87buildings	

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

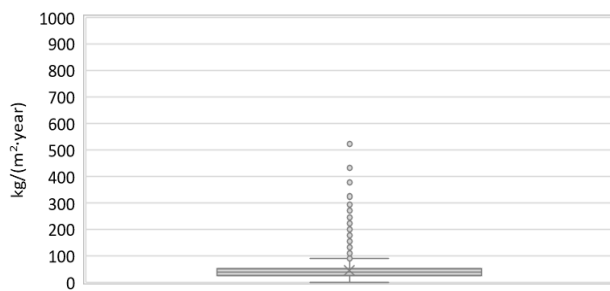
DHW SUPPLY TEMPERATURE



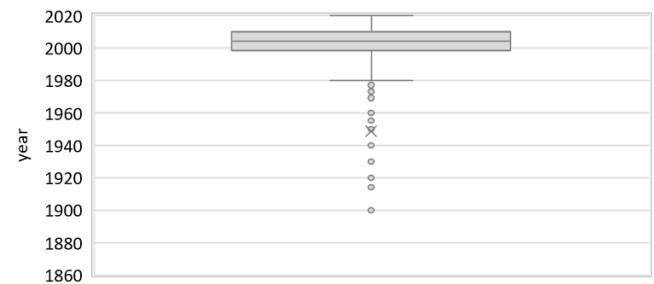
SYSTEM POWER



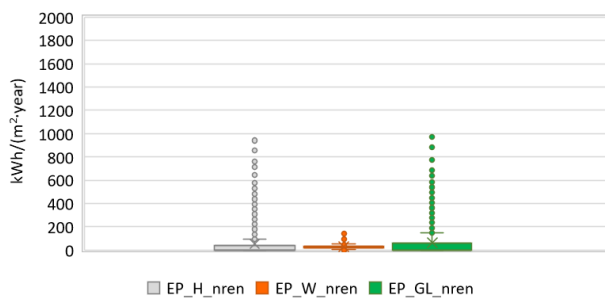
CO₂ EMISSION



HEATING SYSTEM INSTALLATION YEAR



NON-RENEWABLE PRIMARY ENERGY USE



RENEWABLE PRIMARY ENERGY USE

