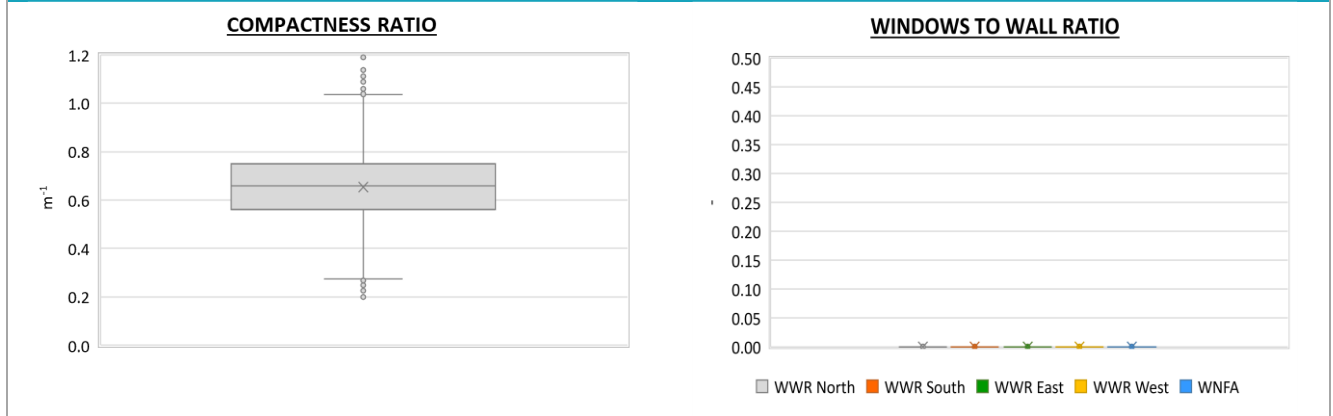


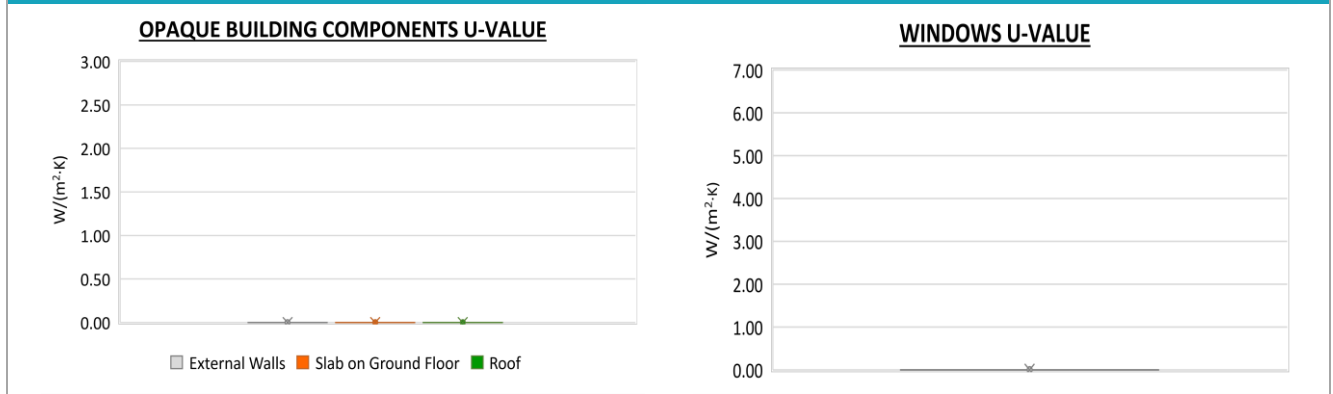
Region:	Trentino Alto Adige						Archetype code: RES_SINGLE_2011-_E_TN		
Building category:	Residential buildings-Single family								
Period of construction:	>2011								
Climatic zone:	E	Number of records:		1625		Data sources: APE (100%)			
Description (the codes associated with walls and slabs refer to the structures described in UNI/TR 11552:2014):									
External walls: no data available Roof slabs: no data available									
	Data	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	174	137	100	126	184	
	Heated gross volume	$V_{H,g}$	m ³	-	-	-	-	-	
	Heated net volume	$V_{H;n}$	m ³	766	861	413	530	768	
	Compactness ratio	$A_{\text{env}}/V_{H,g}$	m ⁻¹	0.65	0.17	0.56	0.66	0.75	
	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	$U_{\text{fl,up}}$	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	$U_{\text{fl,jlw}}$	W/(m ² ·K)	-	-	-	-	-	
	Windows type	-							
	U-value of the windows	U_W	W/(m ² ·K)	-	-	-	-	-	
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	-	0.30	0.30	0.30	
	Heating system type	Unknown: 59%, Autonomous: 32%, Centralized: 9%							
	Heating generator	Boiler (Unknown type): 34%, Condensing boiler: 29%, Air source heat pump: 23%, Traditional boiler: 8%, Water-source heat pump: 3%, DHC: 2%, Unknown: 1%							
	Daily operating time of the heating system *	t_H	h	14	-	14	14	14	
	Energy carrier	Natural gas: 67%, Electricity: 20%, Solid biomass: 5%, LPG: 3%, District heating: 2%, Electricity from PV, wind turbines, hydraulic turbines: 2%, Gas Oil: 1%							
	Heating emission sub-system	-							
	Cooling system type	Unknown: 84%, Air-cooled chiller: 14%, Water-cooled chiller: 3%							
	Daily operating time of the cooling system *	t_C	h	-	-	-	-	-	
	Cooling emission sub-system	-							
	DHW system type	Autonomous – coupled with heating: 50%, Autonomous - detached from heating: 30%, Unknown: 10%, Centralized – coupled with heating: 8%, district heating: 2%							
DHW generator	Natural gas boiler: 59%, Electric heat pump: 27%, Unknown: 10%, Solar thermal: 3%, Electric boiler: 1%								
* These values were not available in the considered sources, and are thus derived from UNI EN Standards									

Region:	Trentino Alto Adige	Archetype code: RES_SINGLE_2011-_E_TN
Building category:	Residential buildings-Single family	
Period of construction:	>2011	
Climatic zone:	E	
Number of records:		1625

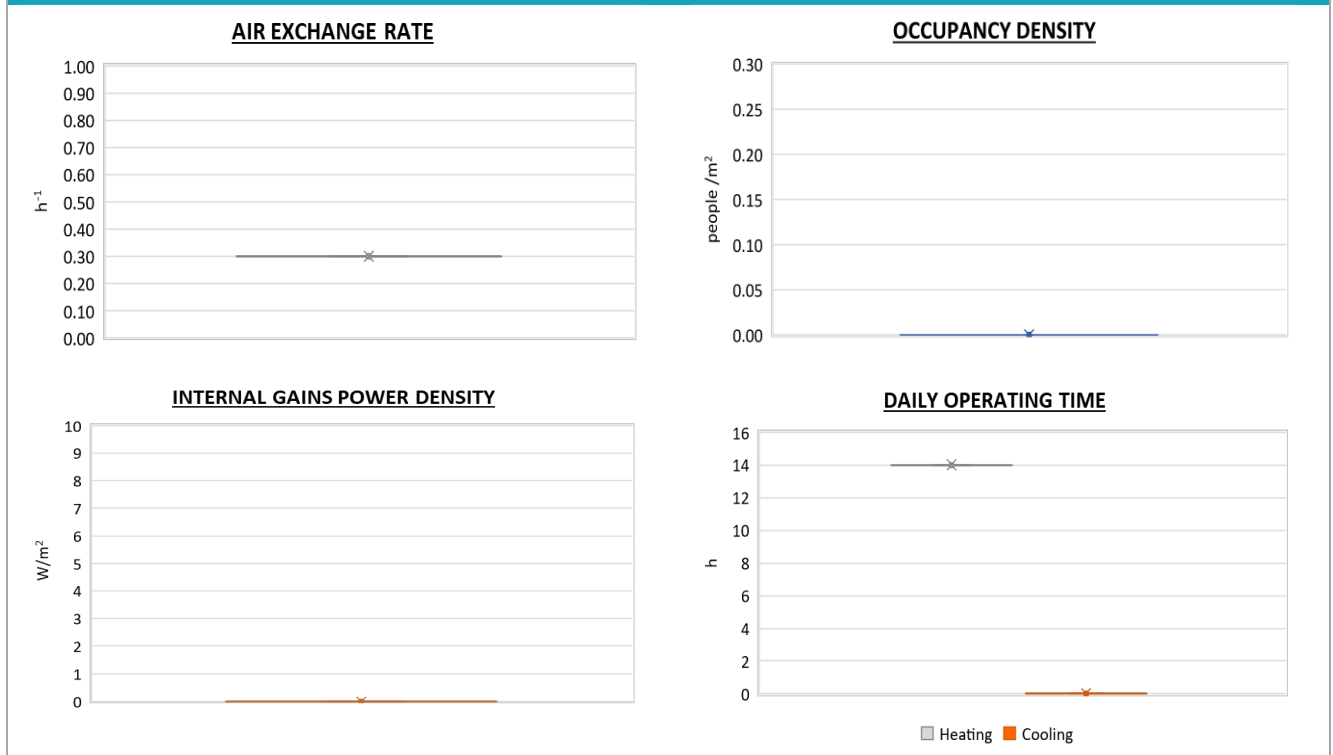
Numerical variables – GEOMETRY



Numerical variables – ENVELOPE



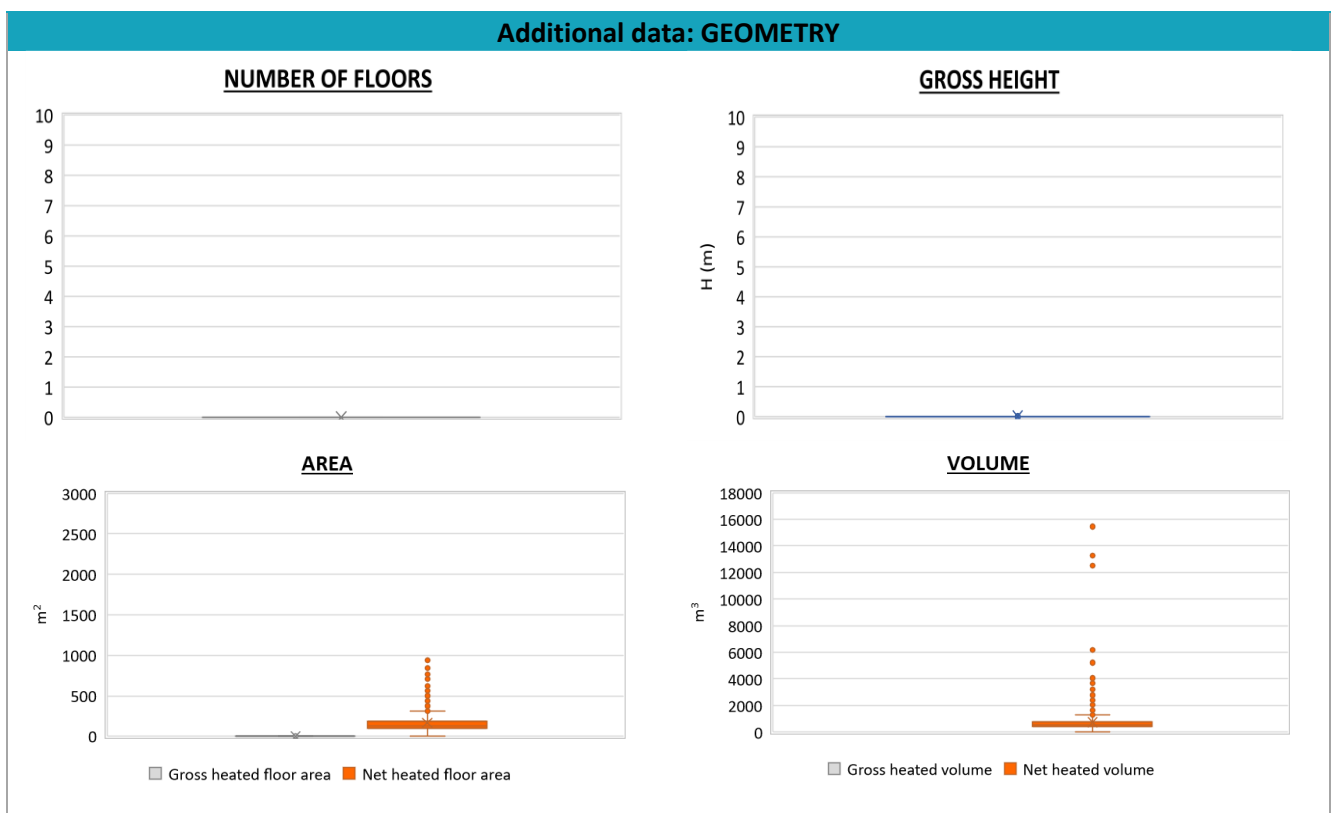
Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE



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_SINGLE_2011-_E_TN
Building category:	Residential buildings-Single family			
Period of construction:	>2011			
Climatic zone:	E	Number of records:	1625	

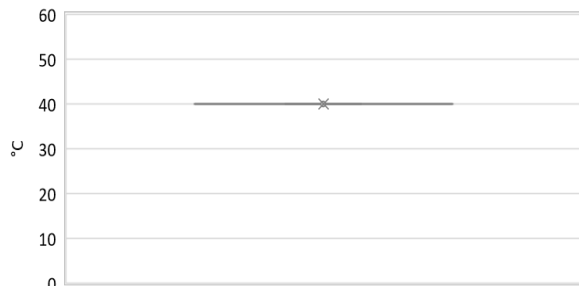
ADDITIONAL DATA								
	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)
THERMAL SYSTEMS	Heating efficiency or <i>COP</i>	$\eta_{H,gen}$ or $COP_{H,gen}$	-	This value has to be retrieved from suitable datasheets				
	Total heating power	$P_{H,gen}$	kW	34	39	17	24	34
	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	30	55	8	13	32
	Temperature of DHW	ϑ_W	°C	40	-	40	40	40
	DHW system power	$P_{W,gen}$	kW	34	39	17	24	34



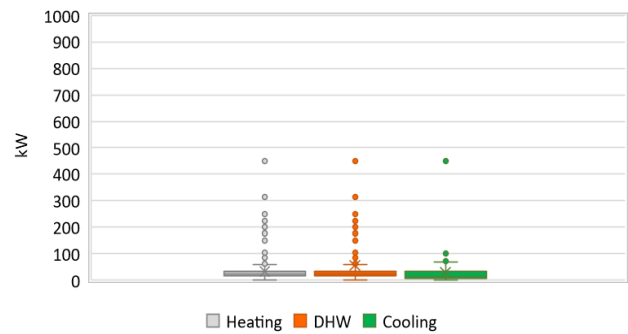
Region:	Trentino Alto Adige	Archetype code: RES_SINGLE_2011-_E_TN
Building category:	Residential buildings-Single family	
Period of construction:	>2011	
Climatic zone:	E	
Number of records: 1625		

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

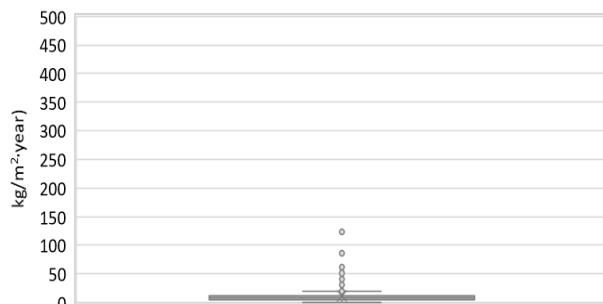
DHW SUPPLY TEMPERATURE



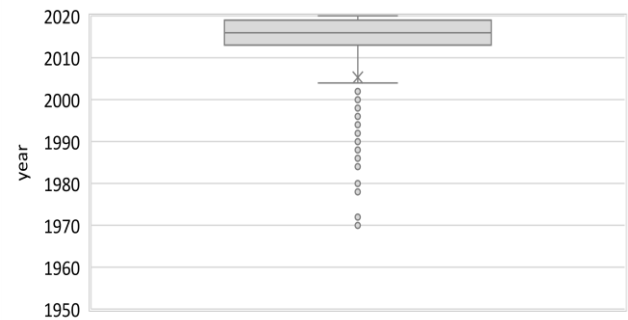
SYSTEM POWER



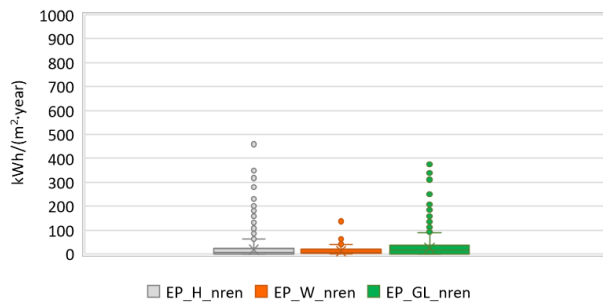
CO2 EMISSION



HEATING SYSTEM INSTALLATION YEAR



NON-RENEWABLE PRIMARY ENERGY USE



RENEWABLE PRIMARY ENERGY USE

