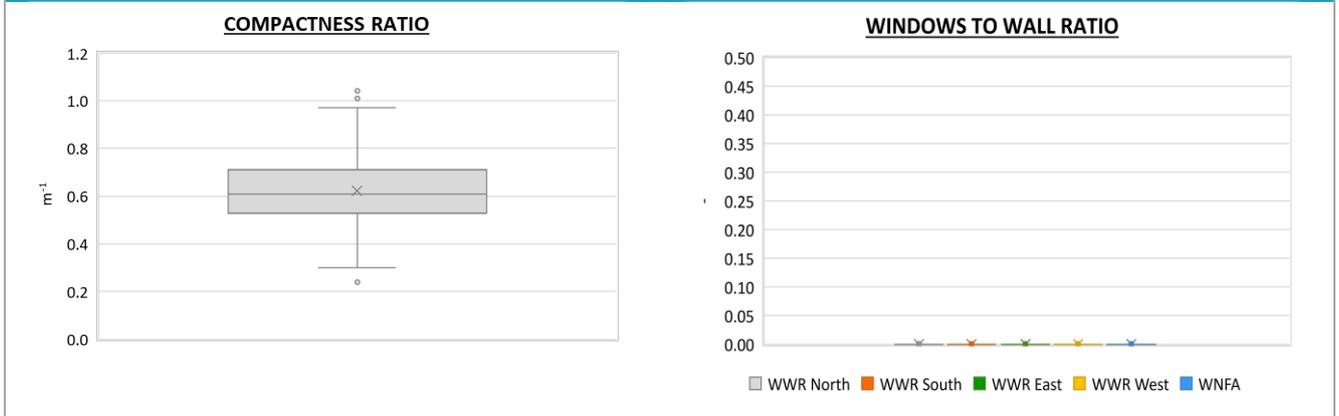
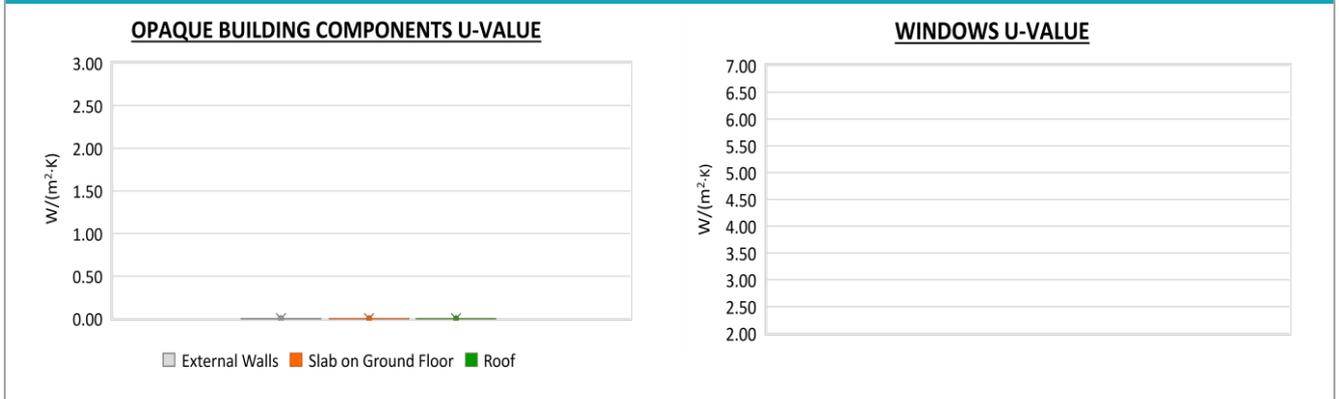
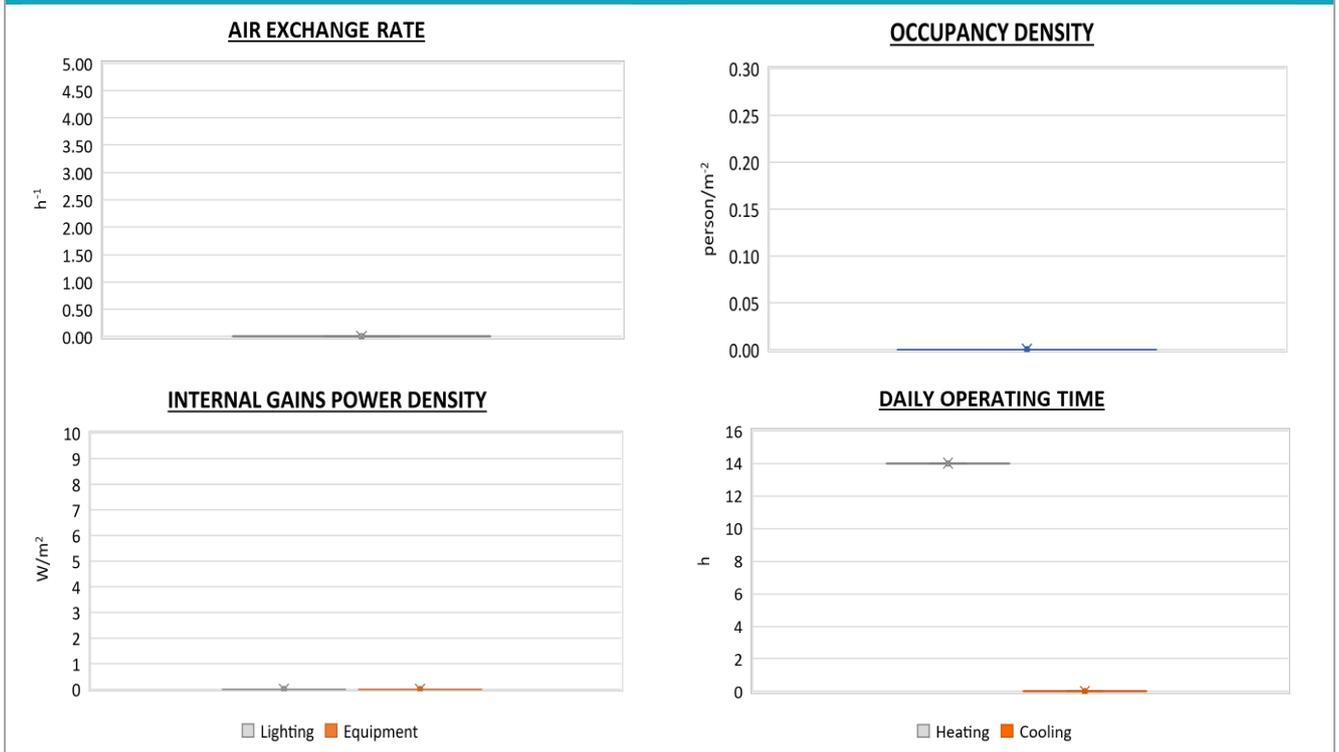


Region:	Trentino Alto Adige						Archetype code:		
Building category:	Commercial buildings						COMM_1951-1960_E_TN		
Period of construction:	1951-1960								
Climatic zone:	E	Number of records:		163					
Description (the codes associated with walls and slabs refer to the structures described in UNI/TR 11552:2014):							Data sources:		
External walls: no data available Roof slabs: no data available							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	213	384	71	96	163	
	Heated gross volume	$V_{H;g}$	m ³	-	-	-	-	-	
	Heated net volume	$V_{H;n}$	m ³	985	1987	317	437	781	
	Compactness ratio	$A_{\text{env}}/V_{H;g}$	m ⁻¹	0.62	0.15	0.53	0.61	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}	-	-	-	-	-	-	
ENVELOPE	Roof type	-							
	U-value of the roof	$U_{fi,up}$	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	$U_{fi,lw}$	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	UNI EN 16798-1					
THERMAL SYSTEMS	Heating system type	Unknown: 57%, Autonomous: 25%, Centralized: 18%							
	Heating generator	Boiler (Unknown type): 38%, Traditional boiler: 20%, Air source heat pump: 15%, Condensing boiler: 13%, Unknown: 8%, DHC: 6%							
	Daily operating time of the heating system *	t_H	h	14	-	14	14	14	
	Energy carrier	Natural gas: 87%, Electricity: 7%, District heating: 3%, Gas Oil: 1%, Electricity from PV, wind turbines, hydraulic turbines: 1%, Solid biomass: 1%							
	Heating emission sub-system	-							
	Cooling system type	Unknown: 86%, Air-cooled chiller: 13%, Water-cooled chiller: 1%							
	Daily operating time of the cooling system *	t_C	h	-	-	-	-	-	
	Cooling emission sub-system	-							
	DHW system type	Autonomous - detached from heating: 39%, Unknown: 34%, Autonomous – coupled with heating: 21%, Centralized – coupled with heating: 5%, District heating: 1%							
	DHW generator	Unknown: 34%, Natural gas boiler: 27%, Electric heat pump: 23%, Electric boiler: 16%							
* These values were not available in the considered sources, and are thus derived from UNI EN Standards									

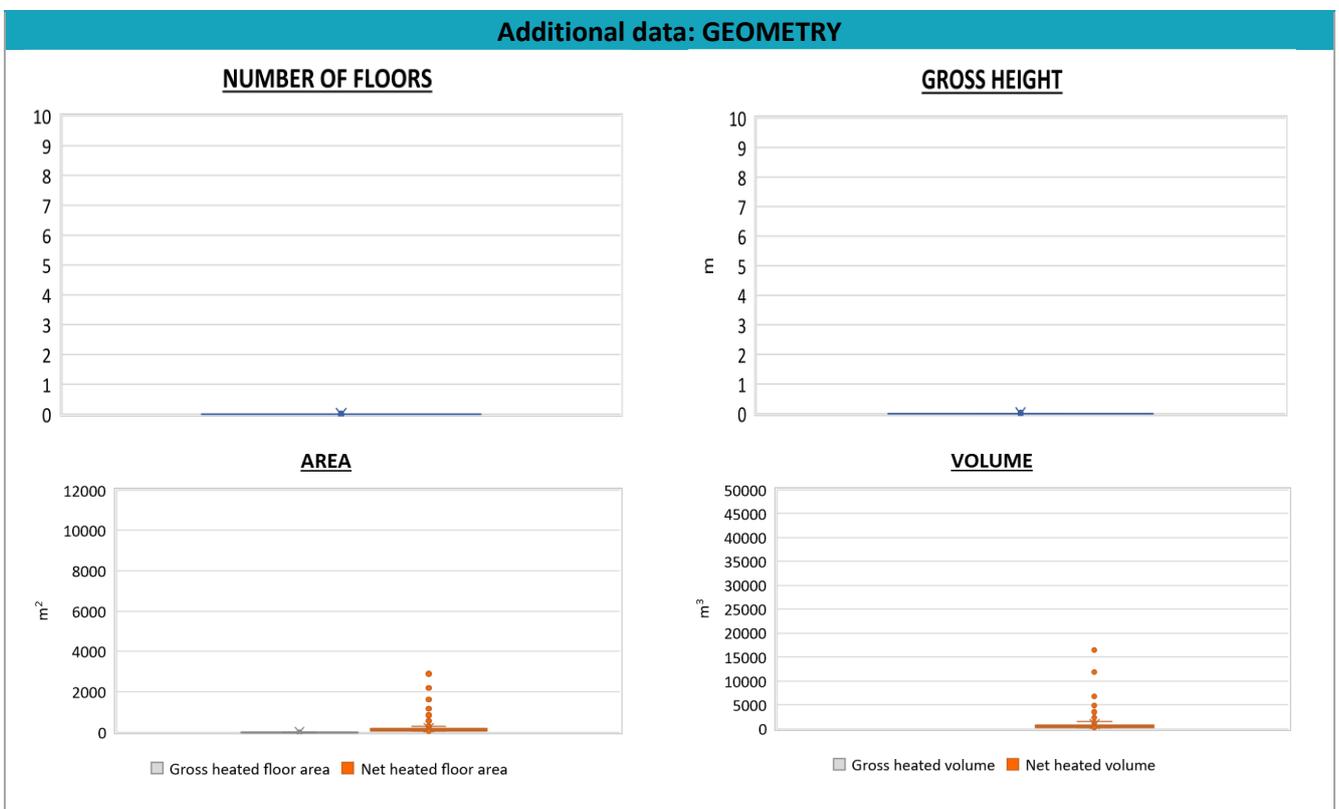
Region:	Trentino Alto Adige	Archetype code: COMM_1951-1960_E_TN
Building category:	Commercial buildings	
Period of construction:	1951-1960	
Climatic zone:	E	

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: COMM_1951-1960_E_TN
Building category:	Commercial buildings	
Period of construction:	1951-1960	
Climatic zone:	E	

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	77	107	24	30	78
	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	29	4	7	20
	Temperature of DHW	ϑ_w	°C	40	-	40	40	40
	DHW system power	$P_{W,gen}$	kW	-	-	-	-	-



Region:	Trentino Alto Adige	Archetype code: COMM_1951-1960_E_TN
Building category:	Commercial buildings	
Period of construction:	1951-1960	
Climatic zone:	E	

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