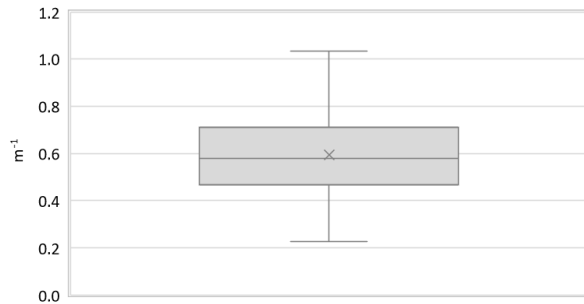


Region:		Trentino					Archetype code: COMM_ 2001-2010_F_TN	
Building category:		Commercial						
Period of construction:		2001-2010						
Climatic zone:		F	Number of records:		189			
Description (the codes associated with walls and slabs refer to the structures described in UNI/TR 11552:2014): External walls: no data available Roof slabs: no data available							Data sources: 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 <sup>2</sup>	-	-	-	-	-
	Heated gross floor area	$A_{H;g}$	m <sup>2</sup>	-	-	-	-	-
	Heated net floor area	$A_{H;n}$	m <sup>2</sup>	274	407	72	139	207
	Heated gross volume	$V_{H;g}$	m <sup>3</sup>	-	-	-	-	-
	Heated net volume	$V_{H;n}$	m <sup>3</sup>	1280	2733	293	570	854
	Compactness ratio	$A_{\text{env}}/V_{H;g}$	m <sup>-1</sup>	0.59	0.17	0.46	0.58	0.76
	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	$A_{wi}/A_{\text{use}}$	-	-	-	-	-	-
	ENVELOPE	Roof type	-					
U-value of the roof		$U_{\text{fl;up}}$	W/(m <sup>2</sup> ·K)	-	-	-	-	-
External walls type		-						
U-value of the wall		$U_{\text{wl}}$	W/(m <sup>2</sup> ·K)	-	-	-	-	-
Slab on ground floor type		-						
U-value of the floor		$U_{\text{fl;lw}}$	W/(m <sup>2</sup> ·K)	-	-	-	-	-
Windows type		-						
U-value of the windows		$U_W$	W/(m <sup>2</sup> ·K)	-	-	-	-	-
Shading system type		-						
GAINS and VENTILATION	Occupancy density *	$O_C$	person/m <sup>2</sup>	UNI EN 16798-1				
	Lighting power density *	$W_L$	W/m <sup>2</sup>	UNI EN 16798-1				
	Equipment power density *	$W_A$	W/m <sup>2</sup>	UNI EN 16798-1				
	Type of ventilation	Natural: 100%						
	Air exchange rate *	$n$	h <sup>-1</sup>	UNI EN 16798-1				
THERMAL SYSTEMS	Heating system type	Unknown 49%; Autonomous: 26%; Centralized: 25%						
	Heating generator	Boiler (unknown type): 99%; Air-source heat pump: 1%						
	Daily operating time of the heating system *	$t_H$	h	No limitation				
	Energy carrier	District heating: 50%; Electricity: 50%						
	Heating emission sub-system	-						
	Cooling system type	Unknown: 95%; Air-cooled chiller: 5%						
	Daily operating time of the cooling system *	$t_C$	h	No limitation				
	Cooling emission sub-system	-						
	DHW system type	Unknown: 32%; Autonomous – coupled with heating: 29%; Autonomous - detached from heating: 22%; Centralized – coupled with heating: 15%; District heating: 2%						
	DHW generator	Natural gas boiler: 44%; Unknown 28%; Electric Heat Pump: 17%; Electric boiler: 11%						
	* These values were not available in the considered sources, and are thus derived from UNI EN Standards							

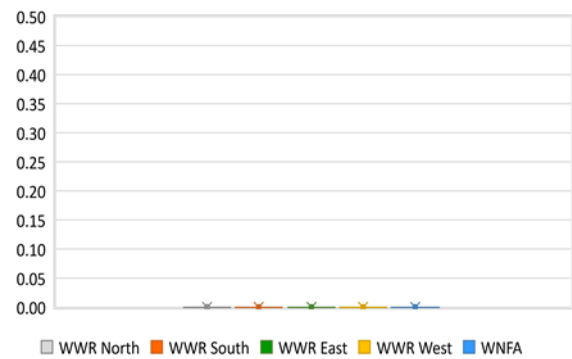
Region:	Trentino	Archetype code: COMM_ 2001-2010_F_TN
Building category:	Commercial	
Period of construction:	2001-2010	
Climatic zone:	F	
Number of records:		189

## Numerical variables – GEOMETRY

COMPACTNESS RATIO

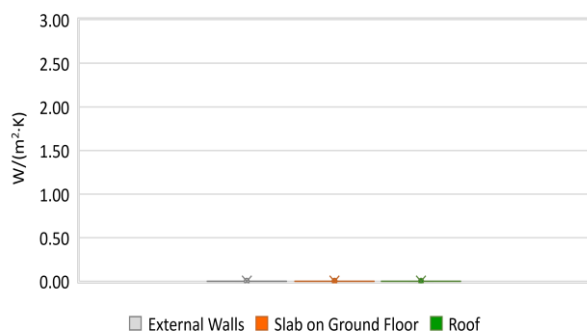


WINDOWS TO WALL RATIO

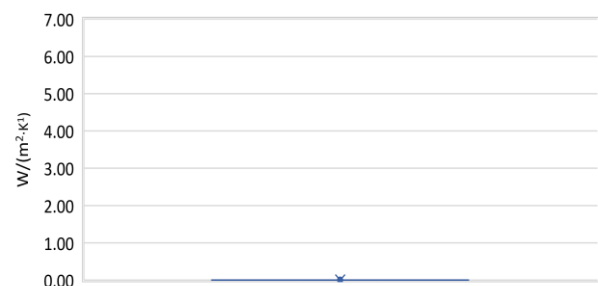


## Numerical variables – ENVELOPE

OPAQUE BUILDING COMPONENTS U-VALUE

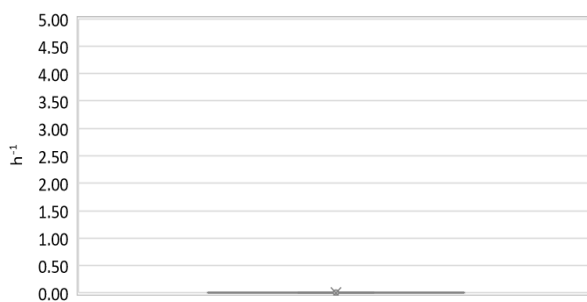


WINDOWS U-VALUE

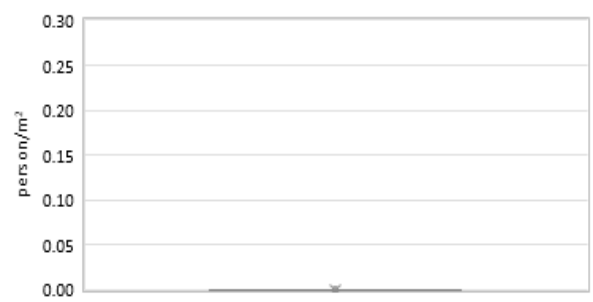


## Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE

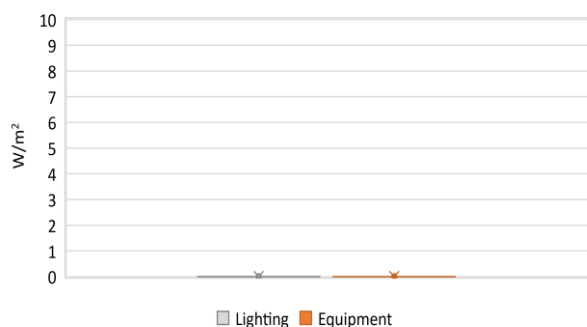
AIR EXCHANGE RATE



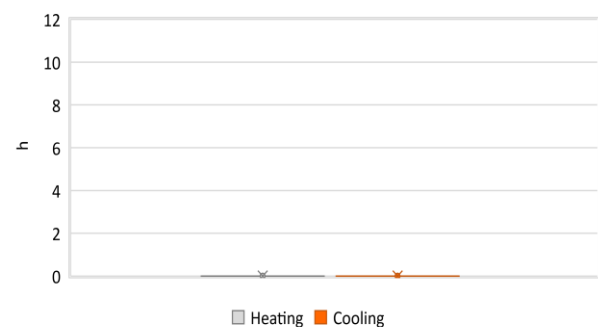
OCCUPANCY DENSITY



INTERNAL GAINS POWER DENSITY



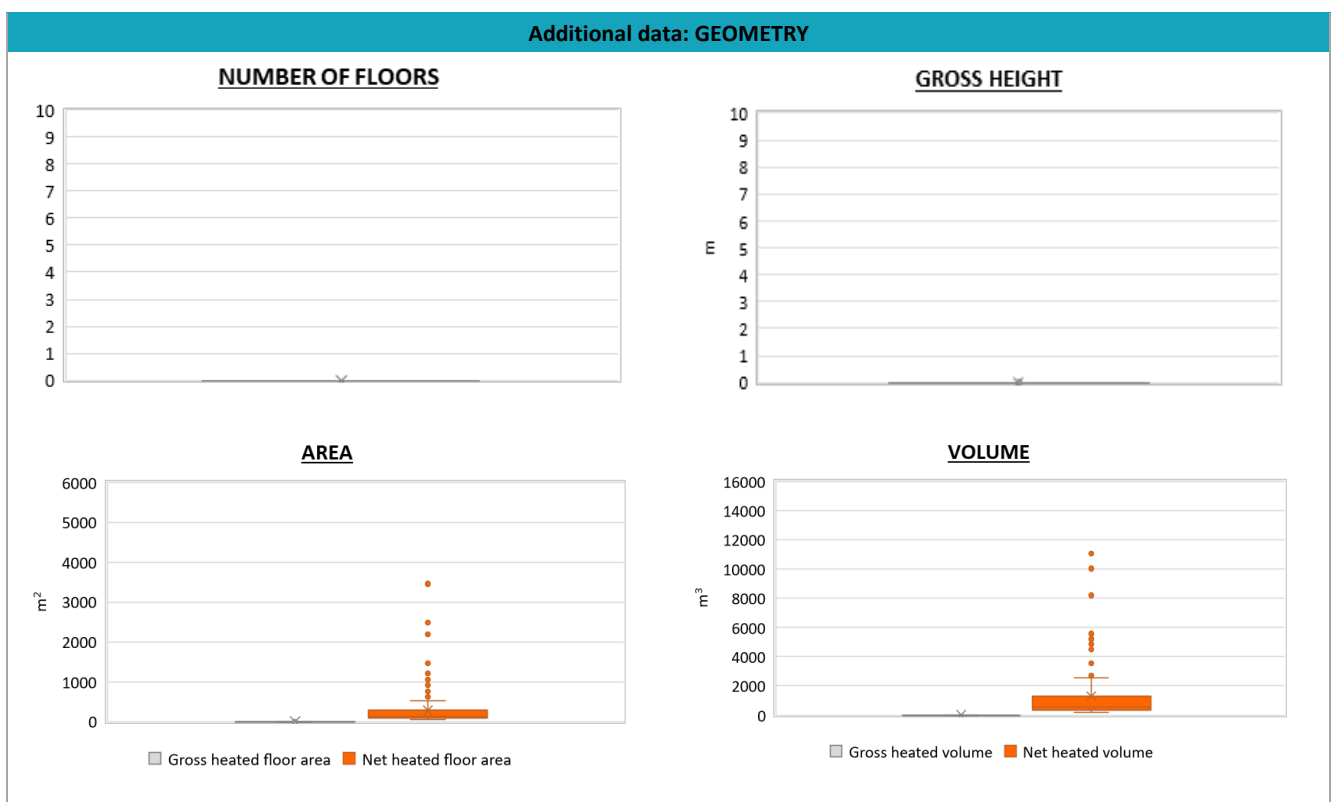
DAILY OPERATING TIME



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	Archetype code: COMM_ 2001-2010_F_TN
Building category:	Commercial	
Period of construction:	2001-2010	
Climatic zone:	F	
Number of records:		189

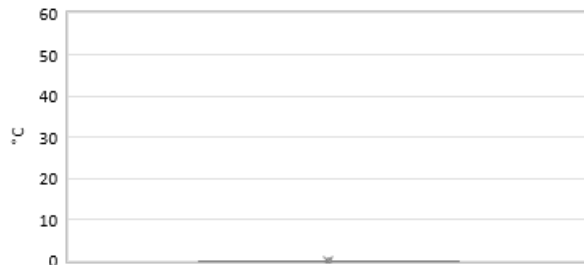
ADDITIONAL DATA								
	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)
THERMAL SYSTEMS	Heating efficiency or <i>COP</i>	$\eta_{H,gen}$ or $COP_{H,gen}$	-	This value has to be retrieved from suitable datasheets				
	Total heating power	$P_{H,gen}$	kW	85	182	24	32	83
	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	26	52	13	5	67
	Temperature of DHW	$\vartheta_W$	°C	-	-	-	-	-
	DHW system power	$P_{W,gen}$	kW	48	77	1.35	25	57



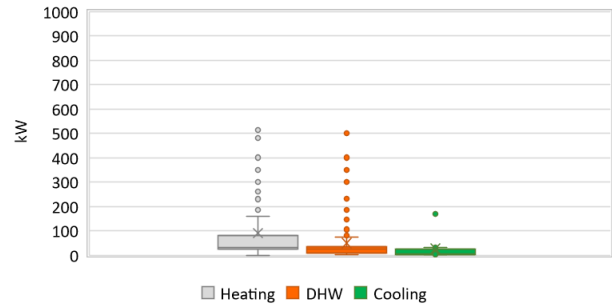
Region:	Trentino	Archetype code: COMM_ 2001-2010_F_TN
Building category:	Commercial	
Period of construction:	2001-2010	
Climatic zone:	F	
Number of records:		189

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

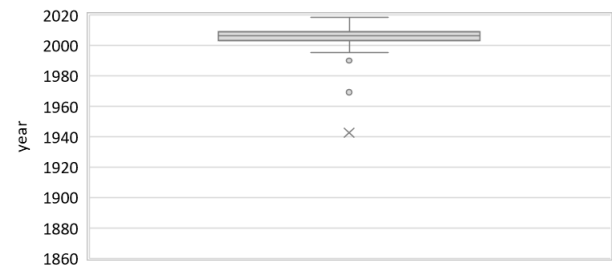
DHW SUPPLY TEMPERATURE



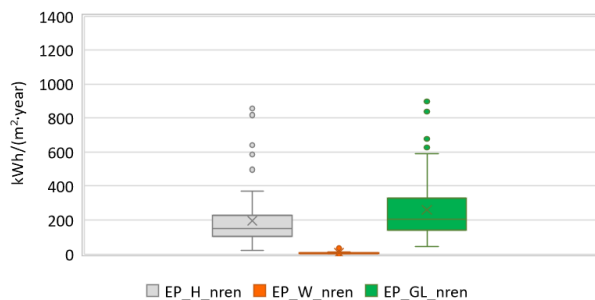
SYSTEM POWER


CO<sub>2</sub> EMISSION


HEATING SYSTEM INSTALLATION YEAR



NON-RENEWABLE PRIMARY ENERGY USE



RENEWABLE PRIMARY ENERGY USE

