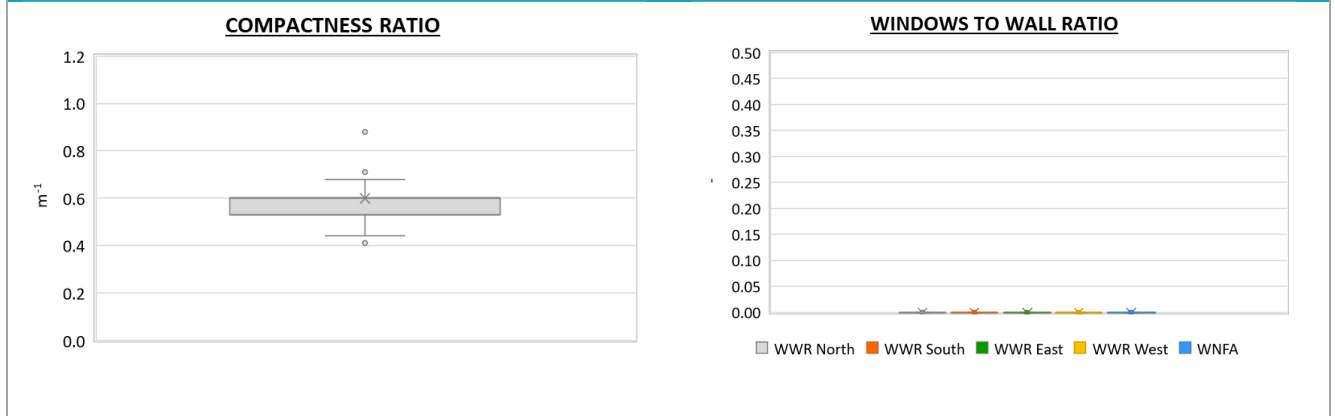


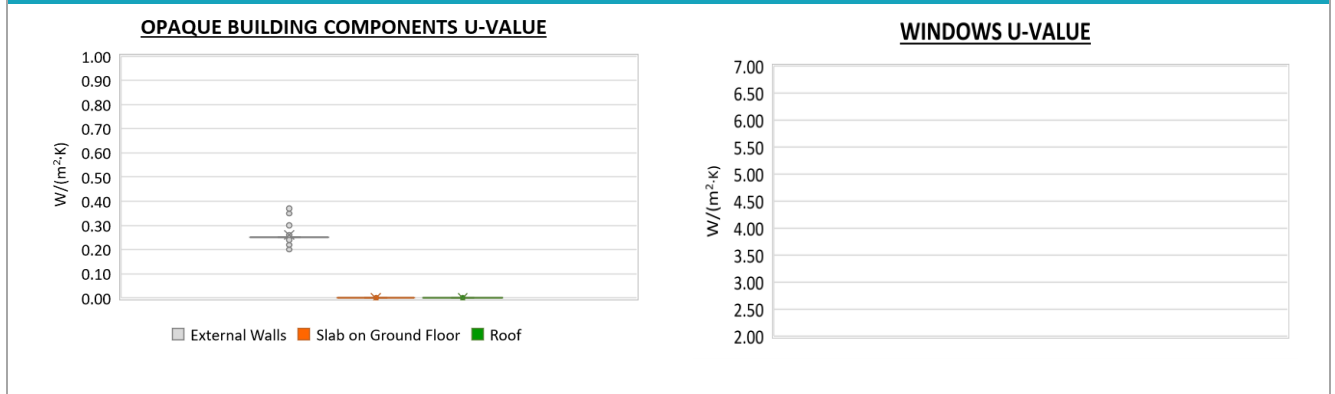
Region:	Trentino Alto Adige						Archetype code: COMM_1991-2020_E	
Building category:	Commercial buildings							
Period of construction:	1991-2020							
Climatic zone:	E	Number of records:				61		
Description (the codes associated with walls and slabs refer to the structures described in UNI/TR 11552:2014): 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 <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>	410.91	325.60	312.12	405.00	450.00
	Heated gross volume	$V_{H,g}$	m <sup>3</sup>	-	-	-	-	-
	Heated net volume	$V_{H,n}$	m <sup>3</sup>	2497.99	1456.23	2200.00	2200.00	2500.00
	Compactness ratio	$A_{\text{env}}/V_{H,g}$	m <sup>-1</sup>	0.60	0.09	0.53	0.60	0.60
	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	$U_{f,up}$	W/(m <sup>2</sup> ·K)	-	-	-	-	-
	External walls type	-						
	U-value of the wall	$U_{wl}$	W/(m <sup>2</sup> ·K)	0.26	0.04	0.25	0.25	0.25
	Slab on ground floor type	-						
	U-value of the floor	$U_{f,lfw}$	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 - Table A.19				
	Lighting power density *	$W_L$	W/m <sup>2</sup>	UNI EN 16798-1 - A.8.3				
	Equipment power density *	$W_A$	W/m <sup>2</sup>	UNI EN 16798-1 - A.8.3				
	Type of ventilation	Natural: 28%, Mechanical: 72%						
	Air exchange rate *	$n$	h <sup>-1</sup>	UNI EN 16798-1 - A.3.1				
THERMAL SYSTEMS	Heating system type	Autonomous: 100%						
	Heating generator	Air source heat pump: 65%, Unknown: 29%, Condensing boiler: 6%						
	Daily operating time of the heating system *	$t_H$	h	14	-	14	14	14
	Energy carrier	Electricity: 91%, Natural gas: 8%, Solid biomass: 1%						
	Heating emission sub-system	Convectors: 88%, Fan coil: 6%, Radiators: 3%, Air heater: 3%						
	Cooling system type	Air-cooled chiller: 62%, Unknown: 38%						
	Daily operating time of the cooling system *	$t_C$	h	-	-	-	-	-
	Cooling emission sub-system	Fan coil: 60%, Radiant panels: 40%						
	DHW system type	Autonomous - detached from heating: 57%, Unknown: 28%, Autonomous – coupled with heating: 15%						
	DHW generator	Solar thermal: 63%, Unknown: 32%, Natural gas boiler: 4%, 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: COMM_1991-2020_E
Building category:	Commercial buildings	
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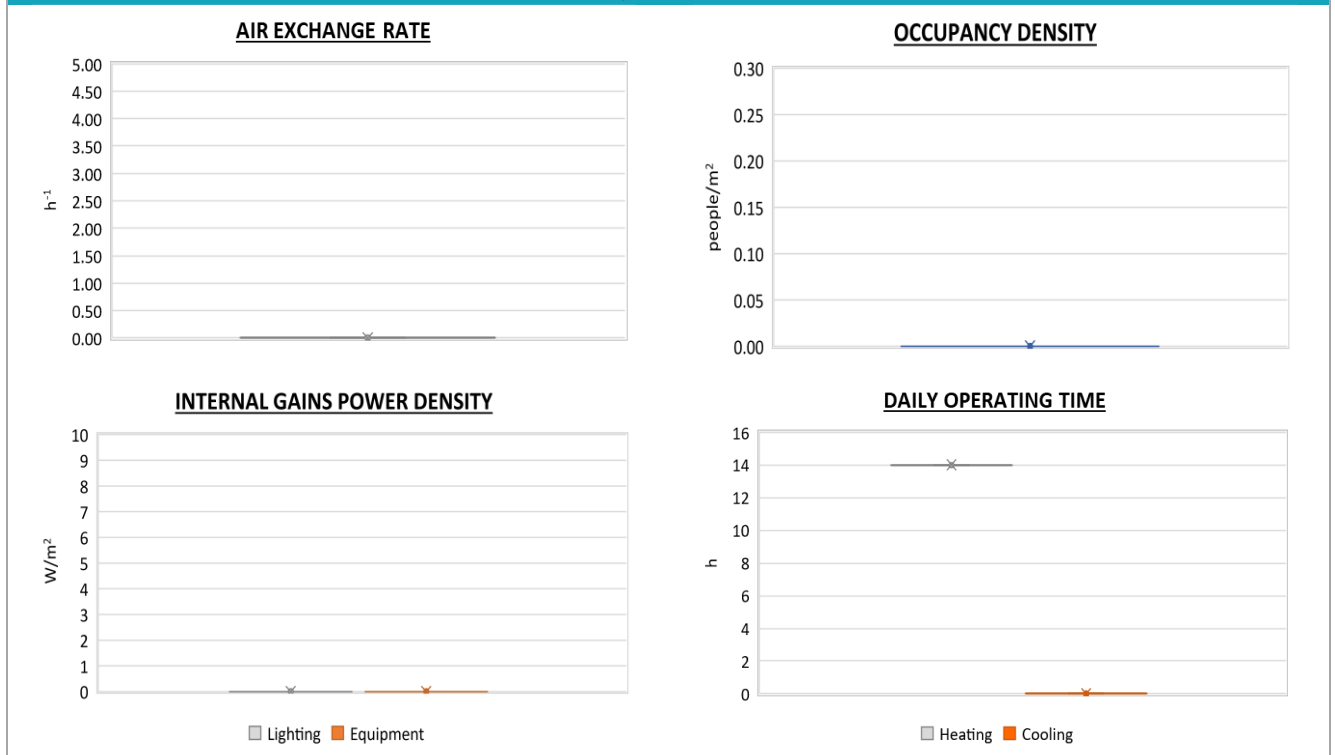
### Numerical variables – GEOMETRY



### Numerical variables – ENVELOPE



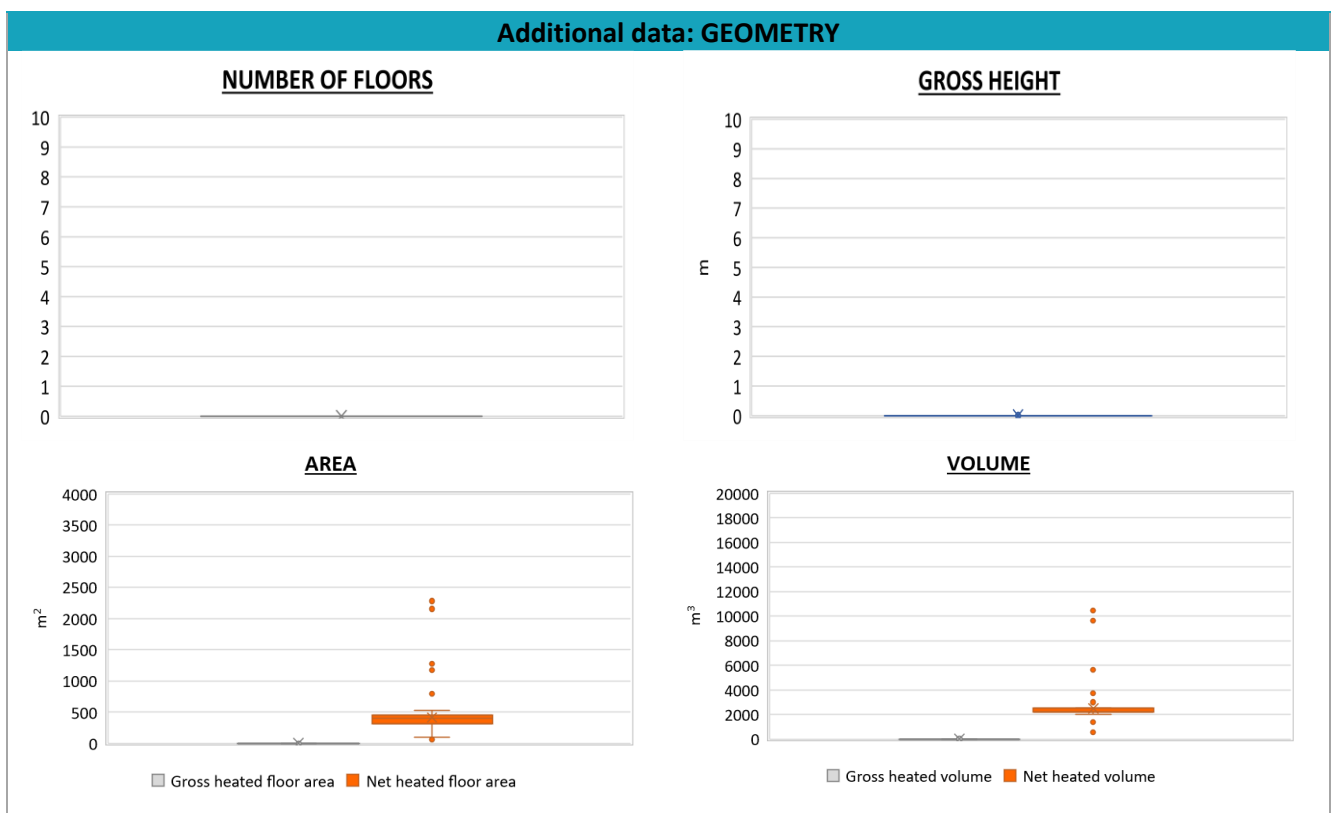
### Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE



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_1991-2020_E
Building category:	Commercial buildings			
Period of construction:	1991-2020			
Climatic zone:	E	Number of records:	61	

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	141	139	91	97	108
	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	135	127	70	70	111
	Temperature of DHW	$\vartheta_W$	°C	40	-	40	40	40
	DHW system power	$P_{W,gen}$	kW	7	19	3	3.3	3.5



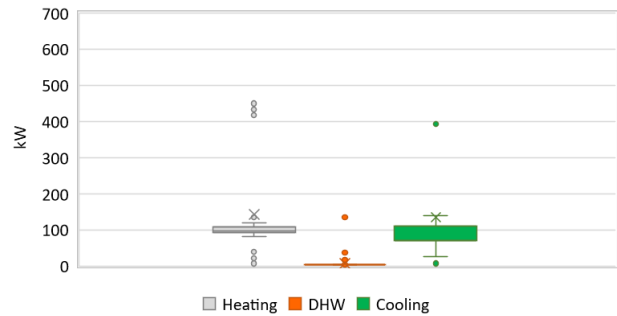
Region:	Trentino Alto Adige	Archetype code: COMM_1991-2020_E
Building category:	Commercial buildings	
Period of construction:	1991-2020	
Climatic zone:	E	
Number of records:		61

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

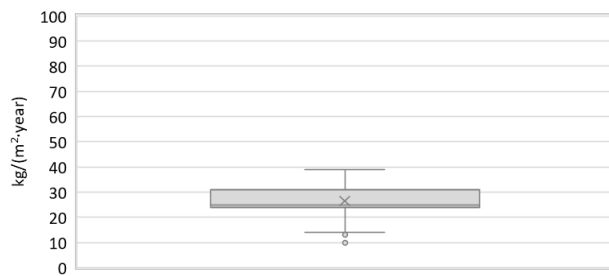
**DHW SUPPLY TEMPERATURE**



**SYSTEM POWER**



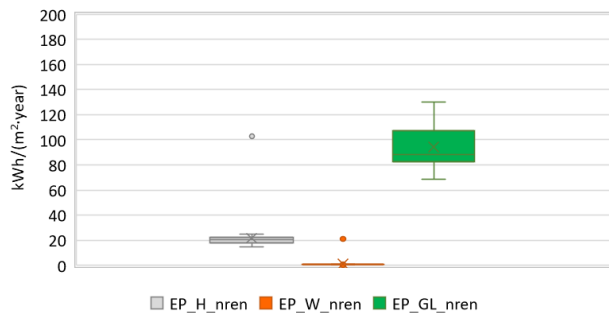
**CO<sub>2</sub> EMISSION**



**HEATING SYSTEM INSTALLATION YEAR**



**NON-RENEWABLE PRIMARY ENERGY USE**



**RENEWABLE PRIMARY ENERGY USE**

