Region:	Trentino			**Archetype code:** COMM_ -1930_F_TN
Building category:	Commercial			
Period of construction:	<1930			
Climatic zone:	F	**Number of records:**	313	
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	$A_{footprint}$	m^2	-	-	-	-	-
	Heated gross floor area	$A_{H;g}$	m^2	-	-	-	-	-
	Heated net floor area	$A_{H;n}$	m^2	100	80	60	75	105
	Heated gross volume	$V_{H;g}$	m^3	-	-	-	-	-
	Heated net volume	$V_{H;n}$	m^3	437	342	262	342	472
	Compactness ratio	$A_{env}/V_{H;g}$	m^{-1}	0.66	0.17	0.53	0.65	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_{use}	-	-	-	-	-	-
ENVELOPE	Roof type	-						
	U-value of the roof	$U_{fl;up}$	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	$U_{fl;lw}$	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				
	Lighting power density *	W_L	W/m^2	UNI EN 16798-1				
	Equipment power density *	W_A	W/m^2	UNI EN 16798-1				
	Type of ventilation	Natural: 100%						
	Air exchange rate *	n	h^{-1}	UNI EN 16798-1				
THERMAL SYSTEMS	Heating system type	Unknown: 48%; Centralized: 29%; Autonomous: 23%						
	Heating generator	Boiler (unknown type): 73%; Unknown: 20%; Heat exchanger of district heating/cooling: 4%; Air-source heat pump: 2%; Fireplace: 1%						
	Daily operating time of the heating system *	t_H	h	No limitation				
	Energy carrier	Natural gas 42%; Gas oil: 30%; Solid biomass: 13%; District heating: 6%; Electricity:5%; LPG: 4%						
	Heating emission sub-system	-						
	Cooling system type	Unknown: 99%, Air-cooled chiller: 1%						
	Daily operating time of the cooling system *	t_C	h	No limitation				
	Cooling emission sub-system	-						
	DHW system type	Unknown: 39%; Autonomous - detached from heating: 25%; Autonomous – coupled with heating: 21%; Centralized – coupled with heating: 8%; District heating: 7%						
	DHW generator	Unknown: 38%; Natural gas boiler: 30%; Electric Heat Pump: 21%; Electric boiler: 11%						
	* These values were not available in the considered sources, and are thus derived from UNI EN Standards							

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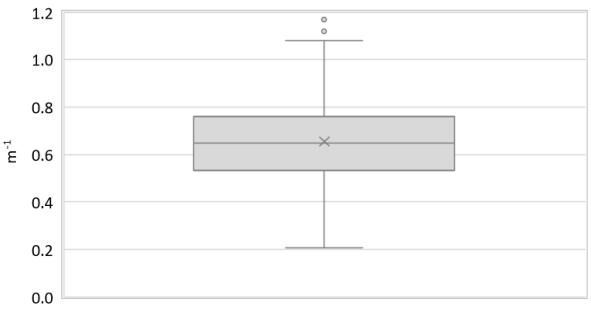
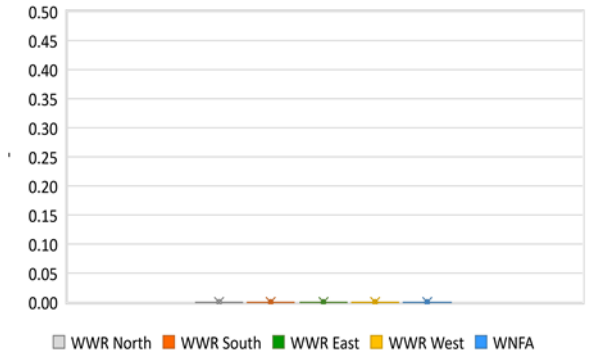
Climatic zone:	F	**Number of records:**	313	

Numerical variables – GEOMETRY

COMPACTNESS RATIO

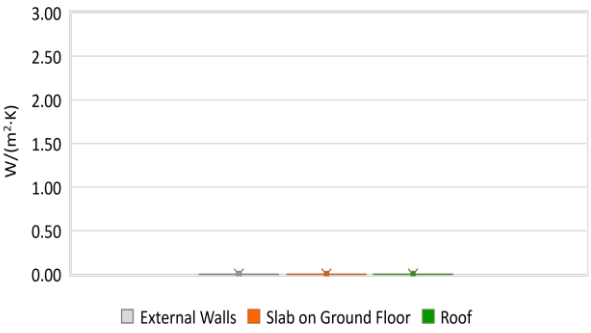


WINDOWS TO WALL RATIO



Numerical variables – ENVELOPE

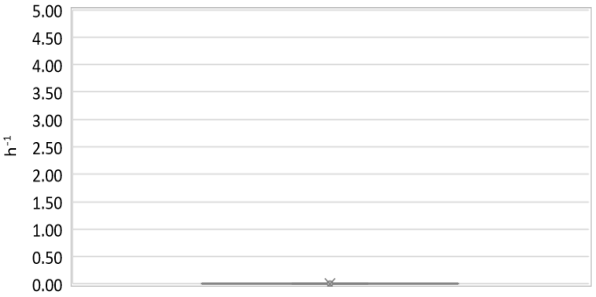
OPAQUE BUILDING COMPONENTS U-VALUE



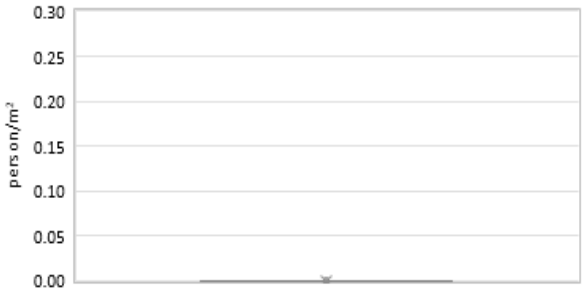
WINDOWS U-VALUE

Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE

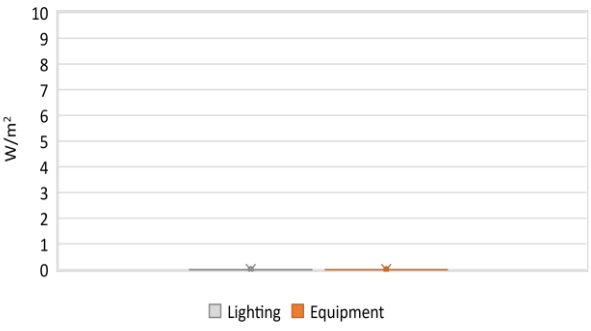
AIR EXCHANGE RATE



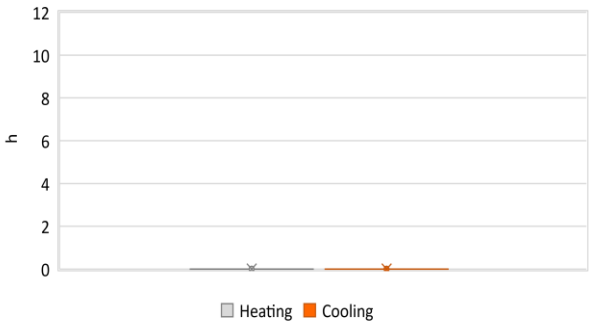
OCCUPANCY DENSITY



INTERNAL GAINS POWER DENSITY



DAILY OPERATING TIME

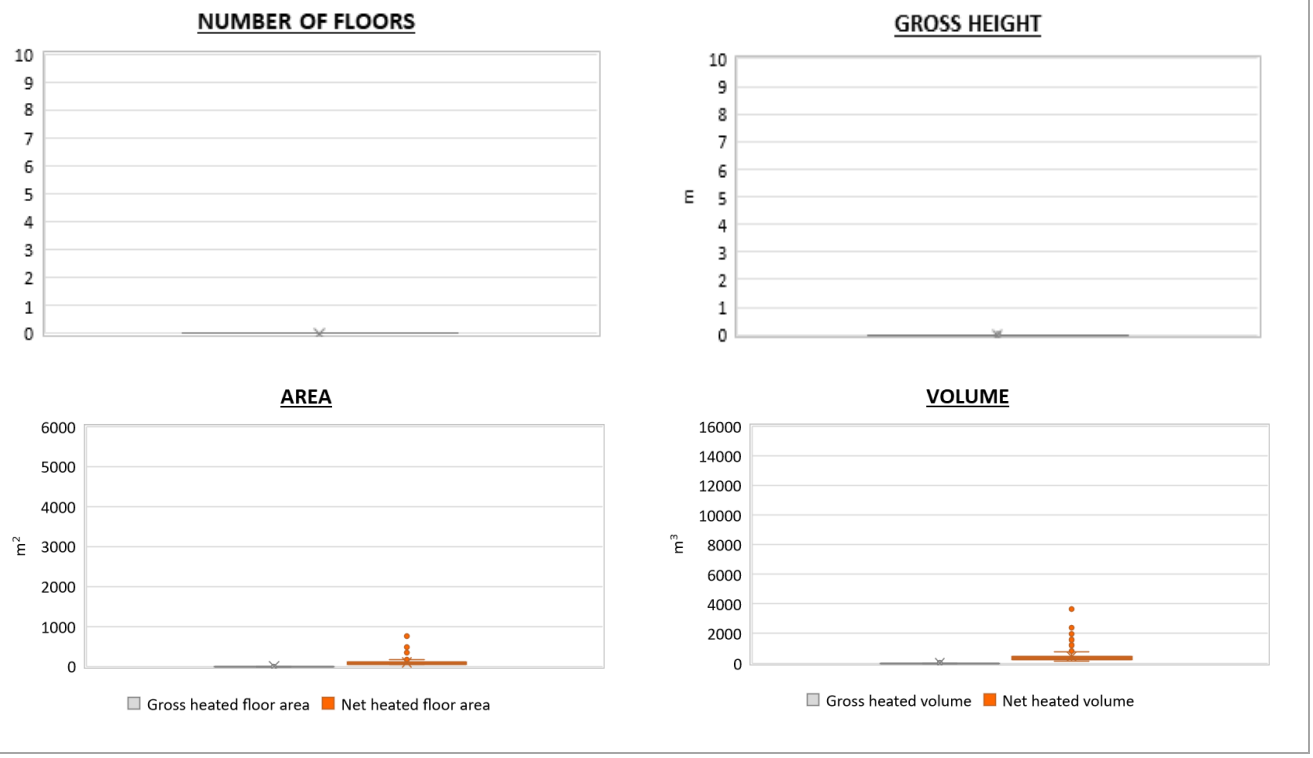


Region:	Trentino			**Archetype code:**
Building category:	Commercial			COMM_ -1930_F_TN
Period of construction:	<1930			
Climatic zone:	F	**Number of records:**	313	

ADDITIONAL DATA

	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)
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	46	88	23	26	34
	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	9	6	6	6	11
	Temperature of DHW	ϑ_W	°C	-	-	-	-	-
	DHW system power *	$P_{W;gen}$	kW	36	96	1	24	30

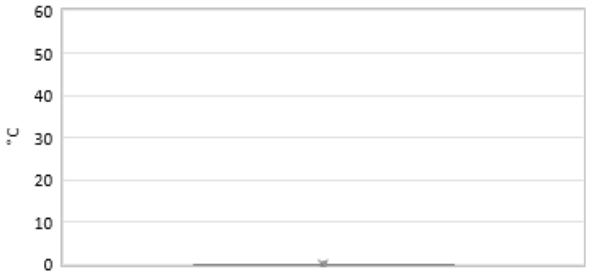
Additional data: GEOMETRY



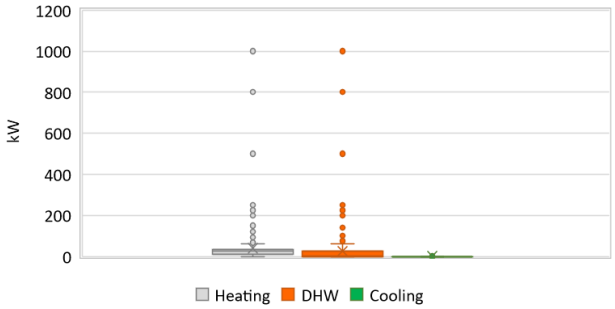
Region:	Trentino			**Archetype code:**
Building category:	Commercial			COMM_ -1930_F_TN
Period of construction:	<1930			
Climatic zone:	F	**Number of records:**	313	

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

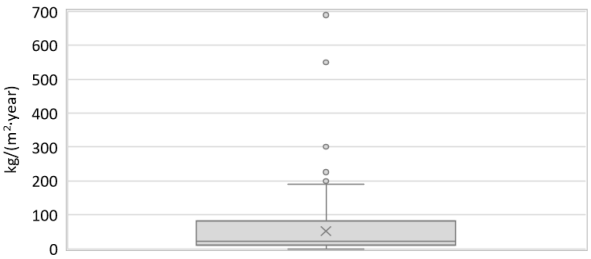
DHW SUPPLY TEMPERATURE



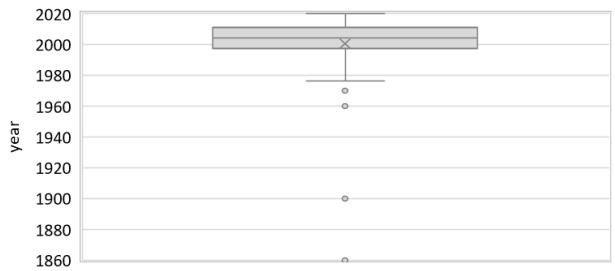
SYSTEM POWER



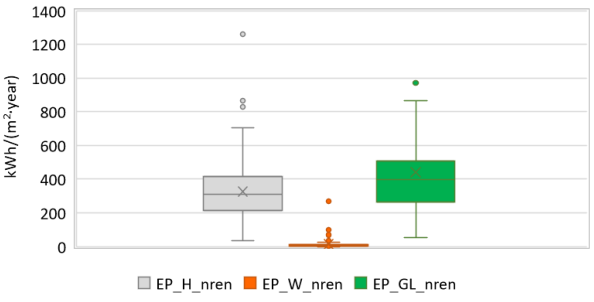
CO_2 EMISSION



HEATING SYSTEM INSTALLATION YEAR



NON-RENEWABLE PRIMARY ENERGY USE



RENEWABLE PRIMARY ENERGY USE