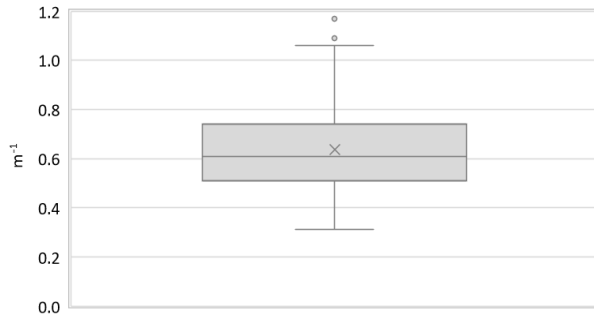


Region:	Trentino						Archetype code: COMM_ 2011-_F_TN	
Building category:	Commercial							
Period of construction:	>2011							
Climatic zone:	F	Number of records:				151		
Description (the codes associated with walls and slabs refer to the structures described in UNI/TR 11552:2014): External walls: 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 ²	-	-	-	-	-
	Heated gross floor area	$A_{H,g}$	m ²	-	-	-	-	-
	Heated net floor area	$A_{H,n}$	m ²	357	441	99	154	453
	Heated gross volume	$V_{H,g}$	m ³	-	-	-	-	-
	Heated net volume	$V_{H,n}$	m ³	1699	2401	404	719	2004
	Compactness ratio	$A_{\text{env}}/V_{H,g}$	m ⁻¹	0.64	0.18	0.51	0.61	0.74
	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		$U_{\text{fl,lw}}$	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 41%; Centralized: 33%; Autonomous: 26%						
	Heating generator	Boiler (unknown type): 90%; Air-source heat pump: 9%; Fireplace: 1%;						
	Daily operating time of the heating system *	t_H	h	No limitation				
	Energy carrier	Electricity: 75%; Electricity from PV, wind turbines, hydraulic turbines: 19%; District heating: 6%						
	Heating emission sub-system	-						
	Cooling system type	Unknown: 88%; Air-cooled chiller: 11%; Water-cooled chiller: 1%						
	Daily operating time of the cooling system *	t_C	h	No limitation				
	Cooling emission sub-system	-						
	DHW system type	Autonomous - detached from heating: 39%; Centralized – coupled with heating: 28%; Unknown: 27%; District heating: 6%						
	DHW generator	Natural gas boiler: 72%; Solar thermal: 26%; Electric Heat Pump: 2%						
* These values were not available in the considered sources, and are thus derived from UNI EN Standards								

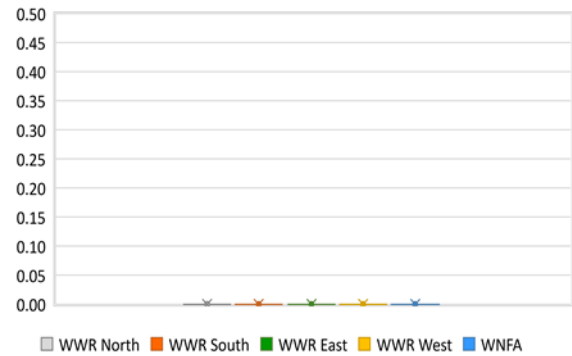
Region:	Trentino	Archetype code: COMM_ 2011-_F_TN
Building category:	Commercial	
Period of construction:	>2011	
Climatic zone:	F	
Number of records:		151

Numerical variables – GEOMETRY

COMPACTNESS RATIO

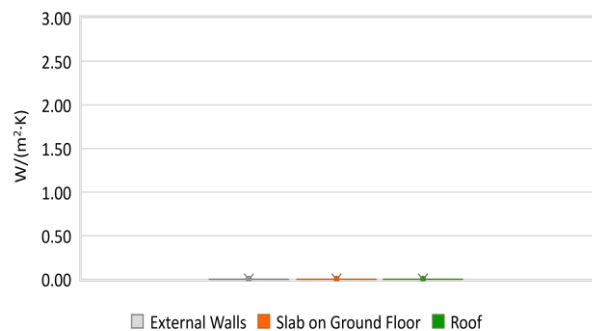


WINDOWS TO WALL RATIO



Numerical variables – ENVELOPE

OPAQUE BUILDING COMPONENTS U-VALUE

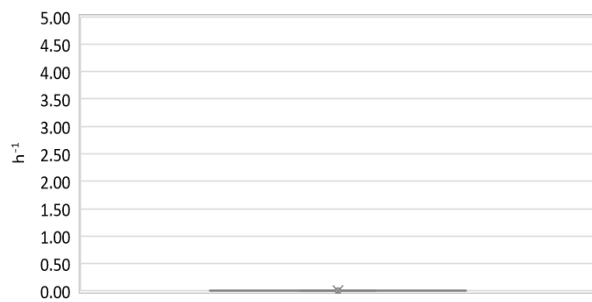


WINDOWS U-VALUE

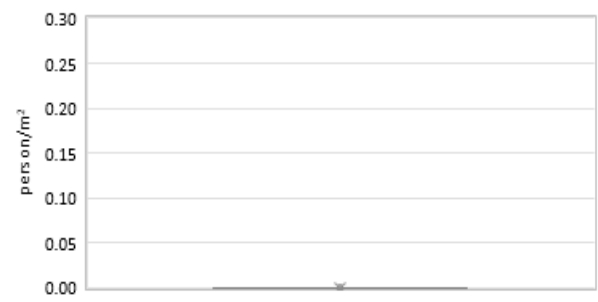


Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE

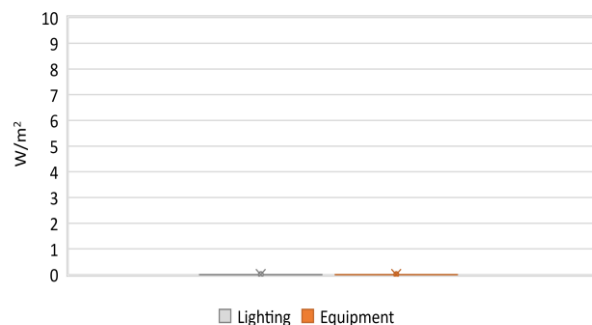
AIR EXCHANGE RATE



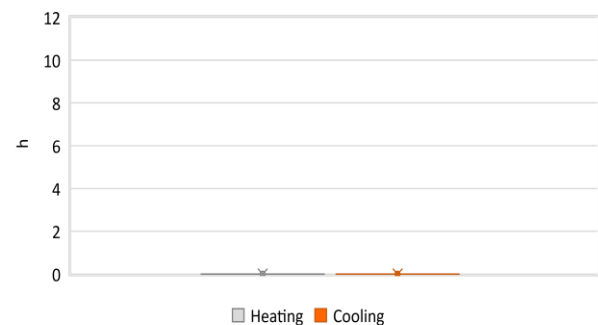
OCCUPANCY DENSITY



INTERNAL GAINS POWER DENSITY

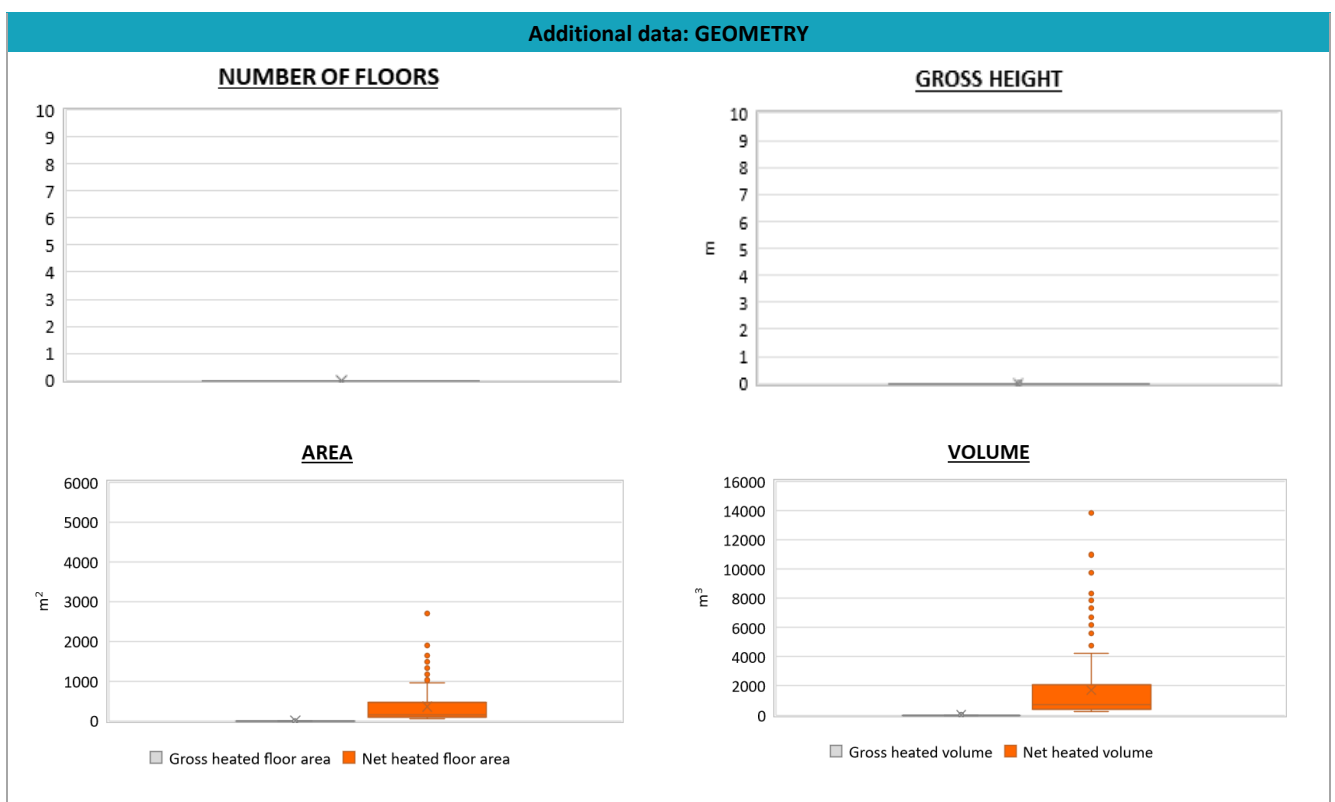


DAILY OPERATING TIME



Region:	Trentino	Archetype code: COMM_ 2011-_F_TN
Building category:	Commercial	
Period of construction:	>2011	
Climatic zone:	F	
Number of records:		151

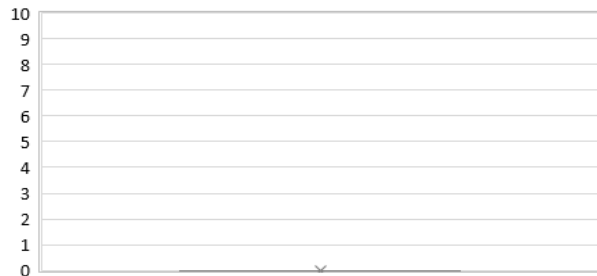
ADDITIONAL DATA								
	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)
THERMAL SYSTEMS	Heating efficiency or <i>COP</i>	$\eta_{H,gen}$ or $COP_{H,gen}$	-	This value has to be retrieved from suitable datasheets				
	Total heating power	$P_{H,gen}$	kW	74	124	24	37	85
	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	75	84	17	46	93
	Temperature of DHW	ϑ_W	°C	-	-	-	-	-
	DHW system power	$P_{W,gen}$	kW	45	57	9	26	60



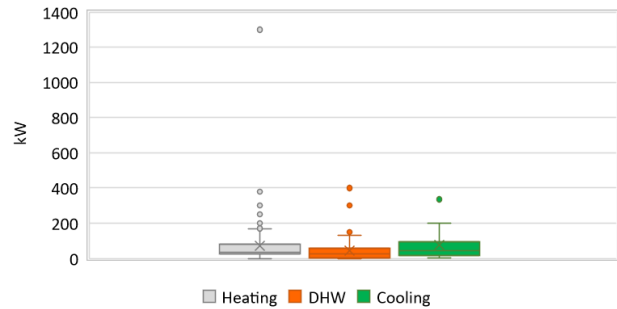
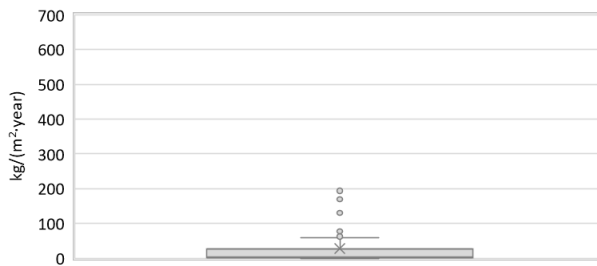
Region:	Trentino	Archetype code: COMM_ 2011-_F_TN
Building category:	Commercial	
Period of construction:	>2011	
Climatic zone:	F	
Number of records:		151

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

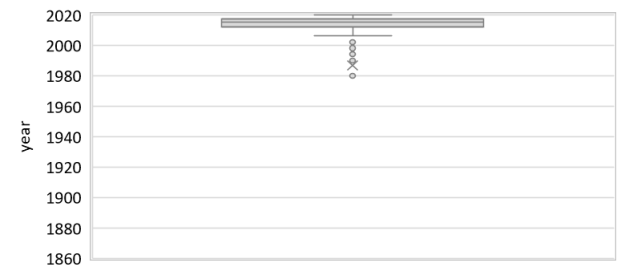
NUMBER OF FLOORS



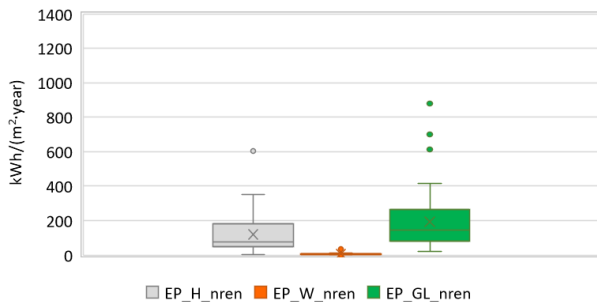
SYSTEM POWER


CO₂ EMISSION


HEATING SYSTEM INSTALLATION YEAR



NON-RENEWABLE PRIMARY ENERGY USE



RENEWABLE PRIMARY ENERGY USE

