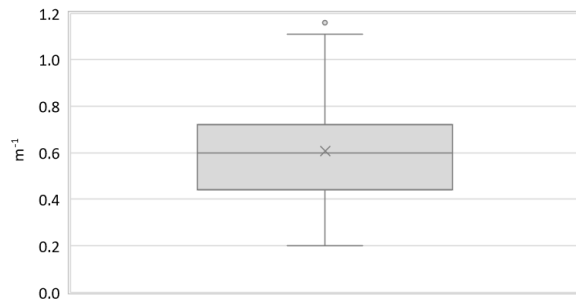


Region:		Trentino					Archetype code: OFF_ 2011-_F_TN	
Building category:		Office buildings						
Period of construction:		>2011						
Climatic zone:		F	Number of records:		143			
Description (the codes associated with walls and slabs refer to the structures described in UNI/TR 11552:2014): External 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>	395	759	82	164	385
	Heated gross volume	$V_{H;g}$	m <sup>3</sup>	-	-	-	-	-
	Heated net volume	$V_{H;n}$	m <sup>3</sup>	1967	3879	347	710	1813
	Compactness ratio	$A_{\text{env}}/V_{H;g}$	m <sup>-1</sup>	0.61	0.21	0.44	0.60	0.72
	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		$U_{\text{w}}$	W/(m <sup>2</sup> ·K)	-	-	-	-	-
Shading system type		-						
GAINS and VENTILATION	Occupancy density *	$O_{\text{C}}$	person/m <sup>2</sup>	UNI EN 16798-1				
	Lighting power density *	$W_{\text{L}}$	W/m <sup>2</sup>	UNI EN 16798-1				
	Equipment power density *	$W_{\text{A}}$	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	Centralized: 41%; Unknown 36%; Autonomous: 23%						
	Heating generator	Boiler (unknown type): 81%; ; Unknown: 12%; Heat exchanger of district heating/cooling: 5%; Fireplace: 2%						
	Daily operating time of the heating system *	$t_{\text{H}}$	h	No limitation				
	Energy carrier	Natural Gas: 56%; Electricity: 8%; District heating: 5%; Electricity from PV, wind turbines, hydraulic turbines: 2%; Gas Oil: 8%; Liquid and gaseous biomass: 2%; LPG: 3%; Solid biomass: 16%						
	Heating emission sub-system	-						
	Cooling system type	Unknown: 83%; Air-cooled chiller: 17%						
	Daily operating time of the cooling system *	$t_{\text{C}}$	h	No limitation				
	Cooling emission sub-system	-						
	DHW system type	Autonomous – coupled with heating: 31%; Autonomous - detached from heating: 25%; Centralized – coupled with heating: 20%; Unknown: 16%; District heating: 8%						
	DHW generator	Natural gas boiler: 48%; Electric Heat Pump: 30%; Unknown 17%; Electric boiler: 5%						
* These values were not available in the considered sources, and are thus derived from UNI EN Standards								

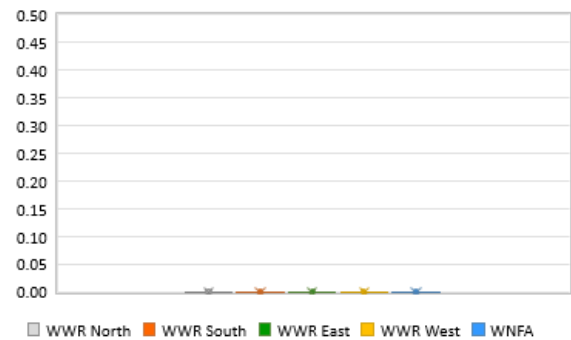
Region:	Trentino	Archetype code: OFF_ 2011-_F_TN
Building category:	Office buildings	
Period of construction:	>2011	
Climatic zone:	F	
Number of records:		143

## Numerical variables – GEOMETRY

COMPACTNESS RATIO

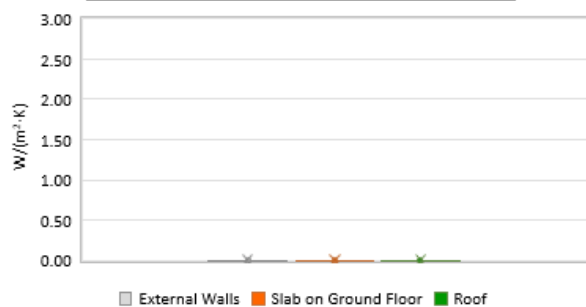


WINDOWS TO WALL RATIO

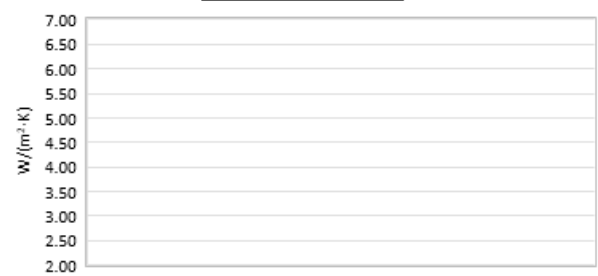


## Numerical variables – ENVELOPE

OPAQUE BUILDING COMPONENTS U-VALUE



WINDOWS U-VALUE



## Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE

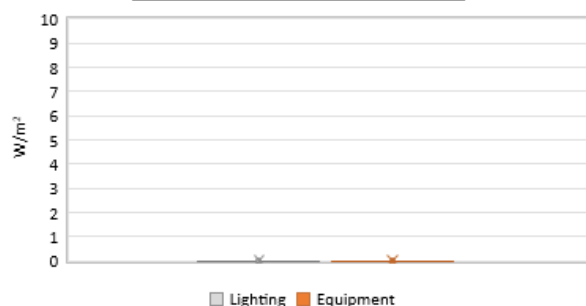
AIR EXCHANGE RATE



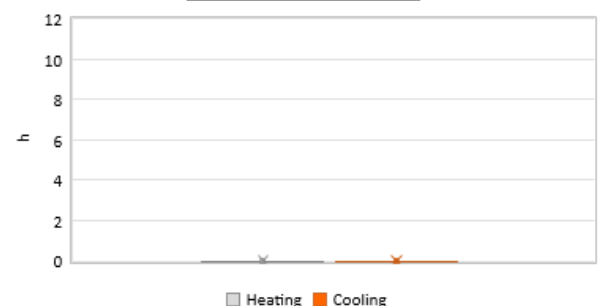
OCCUPANCY DENSITY



INTERNAL GAINS POWER DENSITY

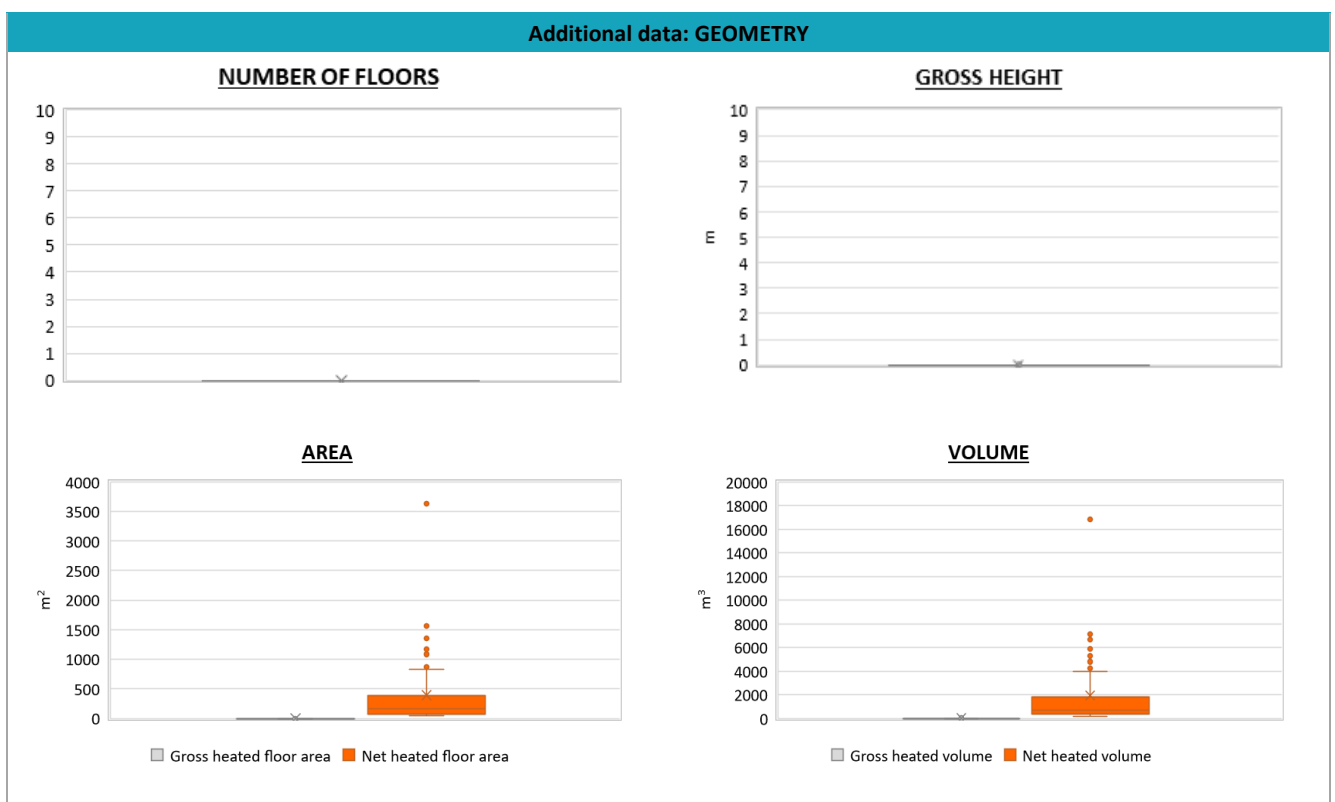


DAILY OPERATING TIME



Region:	Trentino	Archetype code: OFF_ 2011-_F_TN
Building category:	Office buildings	
Period of construction:	>2011	
Climatic zone:	F	
Number of records:		143

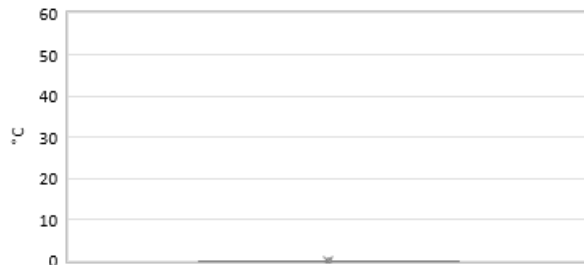
ADDITIONAL DATA								
	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)
THERMAL SYSTEMS	Heating efficiency or <i>COP</i>	$\eta_{H,gen}$ or $COP_{H,gen}$	-	This value has to be retrieved from suitable datasheets				
	Total heating power	$P_{H,gen}$	kW	87	151	24	35	92
	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	38	174	12	27	48
	Temperature of DHW	$\vartheta_W$	°C	-	-	-	-	-
	DHW system power	$P_{W,gen}$	kW	-	-	-	-	-



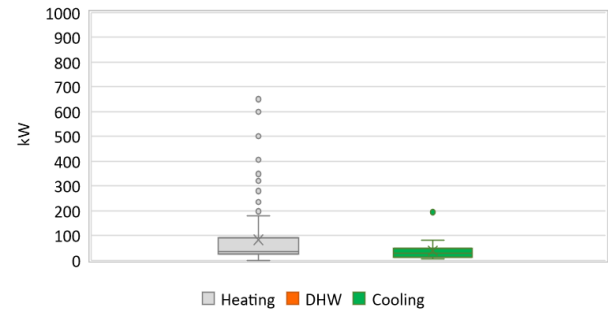
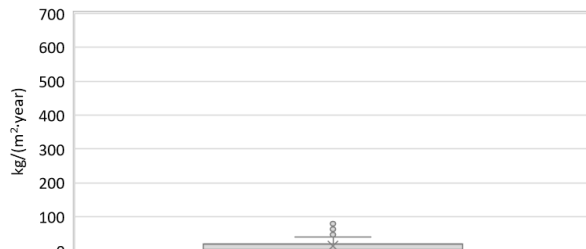
<b>Region:</b>	Trentino	<b>Archetype code:</b> OFF_ 2011-_F_TN
<b>Building category:</b>	Office buildings	
<b>Period of construction:</b>	>2011	
<b>Climatic zone:</b>	F	
<b>Number of records:</b>		143

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

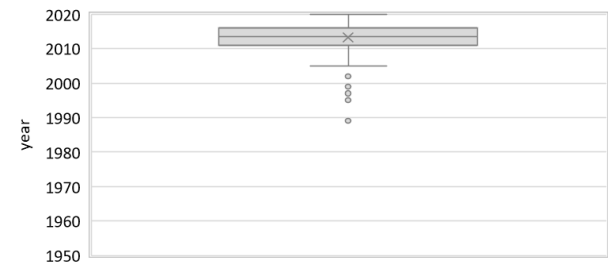
DHW SUPPLY TEMPERATURE



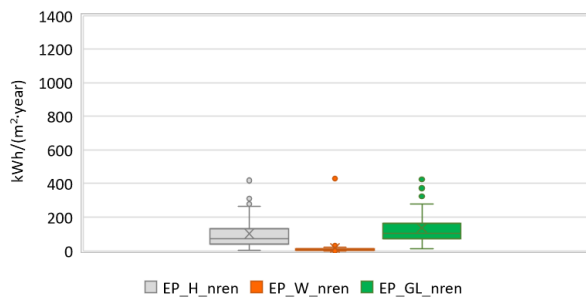
SYSTEM POWER


CO<sub>2</sub> EMISSION


HEATING SYSTEM INSTALLATION YEAR



NON-RENEWABLE PRIMARY ENERGY USE



RENEWABLE PRIMARY ENERGY USE

