Region:	Trentino			Archetype code:		
Building category:	Commercial			COMM_ 1941-1950_F_TN		
Period of construction:	1941-1950					
Climatic zone:	F		Number of records:	65		

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	$A_{footprint}$	m²	-	-	-	-	-
	Heated gross floor area	$A_{H;g}$	m²	-	-	-	-	-
	Heated net floor area	$A_{H;n}$	m²	140	120	72	94	139
	Heated gross volume	$V_{H;g}$	m³	-	-	-	-	-
	Heated net volume	$V_{H;n}$	m³	607	573	302	400	586
	Compactness ratio	$A_{env}/V_{H;g}$	m⁻¹	0.66	0.18	0.54	0.66	0.75
	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/(m²·K)	-	-	-	-	-
	External walls type		-					
	U-value of the wall	U_{wl}	W/(m²·K)	-	-	-	-	-
	Slab on ground floor type		-					
	U-value of the floor	$U_{fl;lw}$	W/(m²·K)	-	-	-	-	-
	Windows type		-					
	U-value of the windows	U_W	W/(m²·K)	-	-	-	-	-
	Shading system type		-					
GAINS and VENTILATION	Occupancy density *	O_C	person/m²	UNI EN 16798-1				
	Lighting power density *	W_L	W/m²	UNI EN 16798-1				
	Equipment power density *	W_A	W/m²	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 57%; %Centralized: 26%; Autonomous: 17%;					
	Heating generator		Boiler (unknown type): 96%; Air-source heat pump: 4%					
	Daily operating time of the heating system *	t_H	h	No limitation				
	Energy carrier		District heating: 67%; Electricity: 33%					
	Heating emission sub-system		-					
	Cooling system type		Unknown: 97%; Air-cooled chiller: 3%					
	Daily operating time of the cooling system *	t_C	h	No limitation				
	Cooling emission sub-system		-					
	DHW system type		Unknown: 35%; Autonomous - detached from heating: 28%; Autonomous – coupled with heating: 22%; Centralized – coupled with heating: 12%; District heating: 3%					
	DHW generator		Natural gas boiler: 35%; Unknown: 29%; Electric Heat Pump: 20%; Electric boiler: 16%					

* These values were not available in the considered sources, and are thus derived from UNI EN Standards

Region:	Trentino	Archetype code:
Building category:	Commercial	COMM_ 1941-1950_F_TN
Period of construction:	1941-1950	
Climatic zone:	F	Number of records: 65

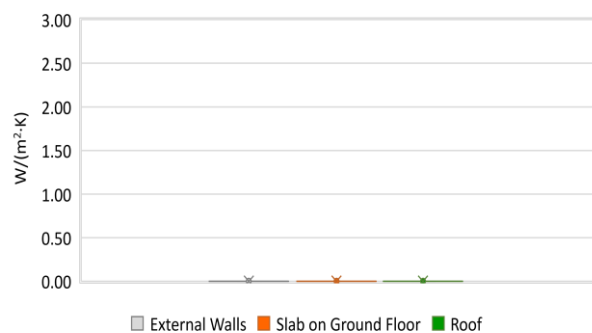### Numerical variables – GEOMETRY

COMPACTNESS RATIO

WINDOWS TO WALL RATIO

☐ WWR North ☐ WWR South ☐ WWR East ☐ WWR West ☐ WNFA
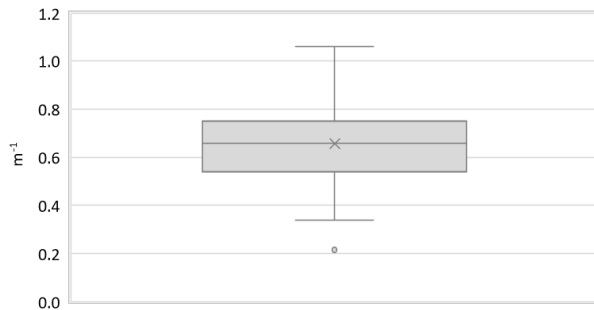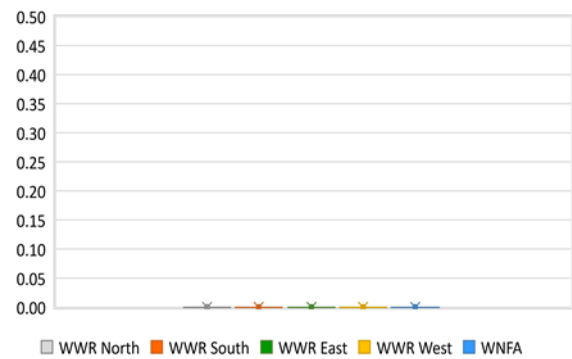
Numerical variables – ENVELOPE

OPAQUE BUILDING COMPONENTS U-VALUE

☐ External Walls ☐ Slab on Ground Floor ☐ Roof

WINDOWS U-VALUE

Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE

AIR EXCHANGE RATE
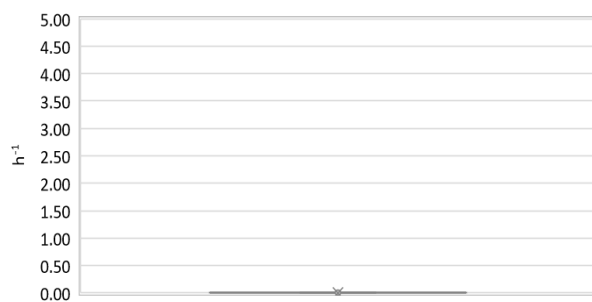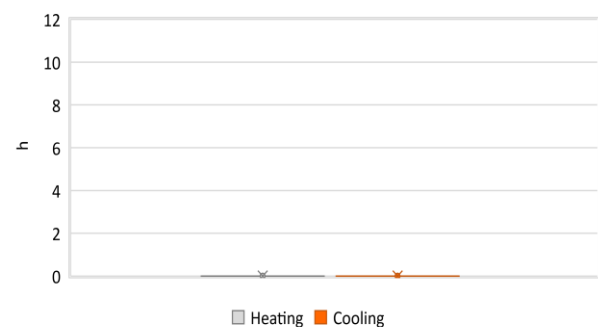

OCCUPANCY DENSITY
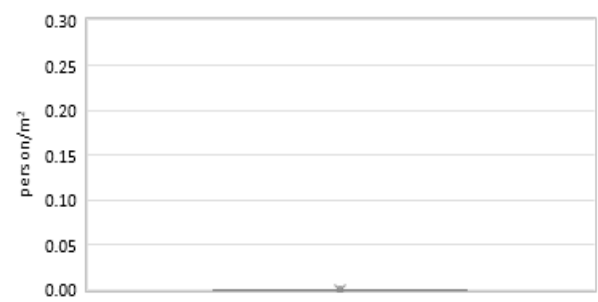
INTERNAL GAINS POWER DENSITY
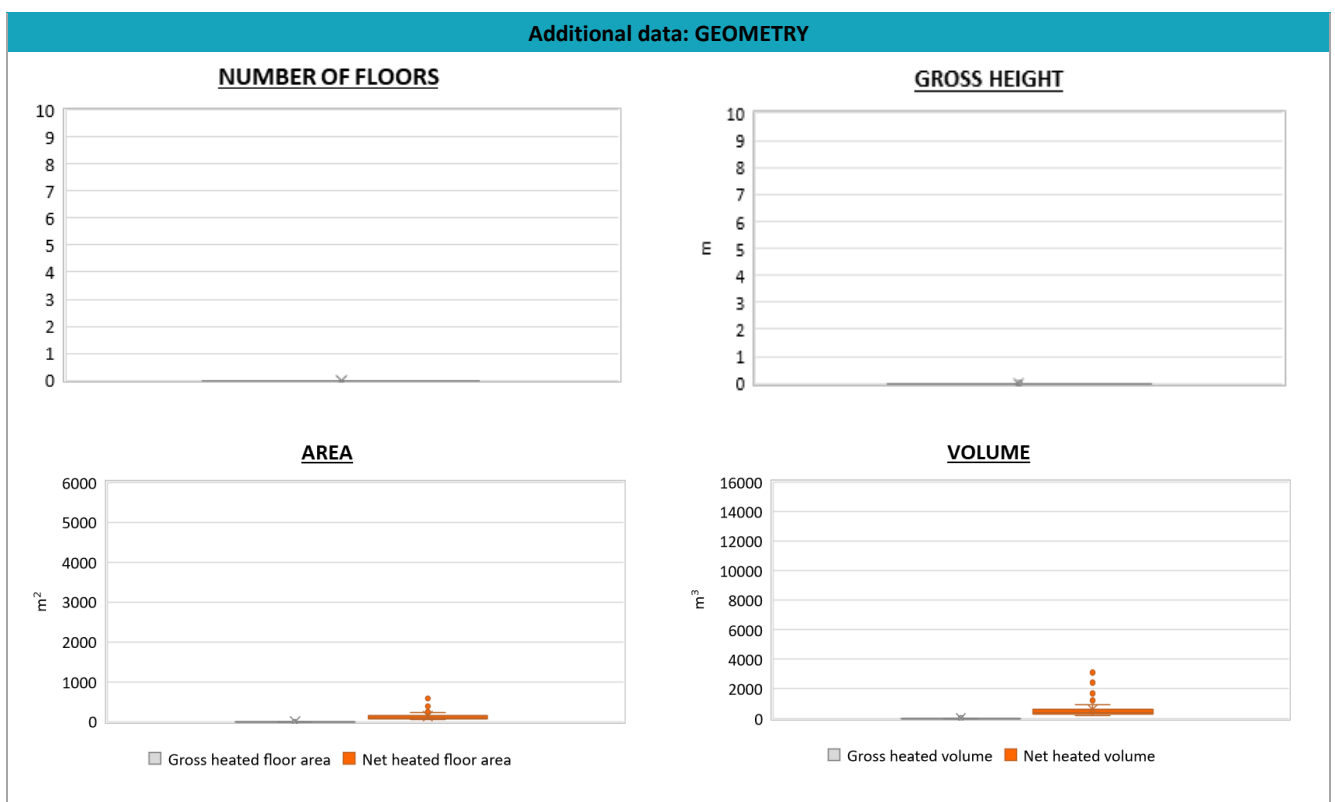

☐ Lighting ☐ Equipment

DAILY OPERATING TIME

☐ Heating ☐ Cooling

Region:	Trentino		Archetype code:
Building category:	Commercial		COMM_
Period of construction:	1941-1950		1941-1950_F_TN
Climatic zone:	F	Number of records:	65

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	52	82	22	30	35
	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	7	3	4	5	7
	Temperature of DHW	ϑ_W	°C	-	-	-	-	-
	DHW system power *	$P_{W;gen}$	kW	24	22	2	24	31

Additional data: GEOMETRY

NUMBER OF FLOORS

GROSS HEIGHT

AREA

☐ Gross heated floor area ■ Net heated floor area

VOLUME

☐ Gross heated volume ■ Net heated volume

Region:	Trentino		Archetype code:
Building category:	Commercial		COMM_ 1941-1950_F_TN
Period of construction:	1941-1950		
Climatic zone:	F	Number of records:	65

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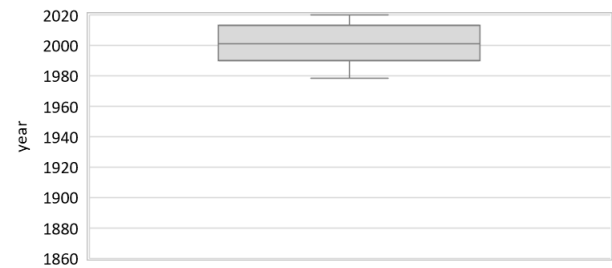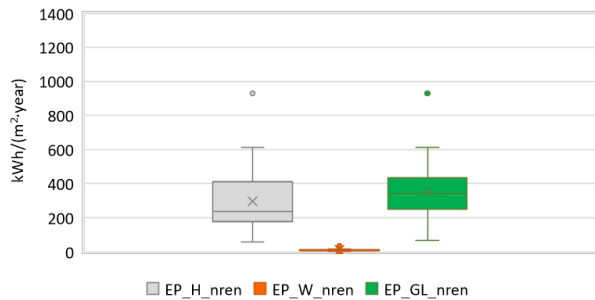
DHW SUPPLY TEMPERATURE

SYSTEM POWER

Heating ■ DHW ■ Cooling
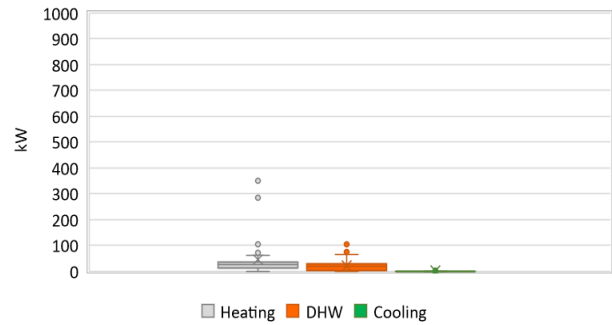
CO₂ EMISSION
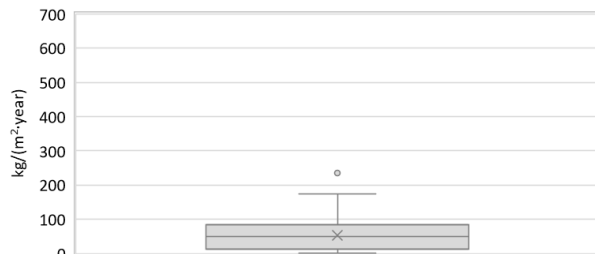
HEATING SYSTEM INSTALLATION YEAR

NON-RENEWABLE PRIMARY ENERGY USE

☐ EP_H_nren ■ EP_W_nren ■ EP_GL_nren

RENEWABLE PRIMARY ENERGY USE

☐ EP_H_ren ■ EP_W_ren