Region:	Liguria		Archetype code:
Building category:	Residential buildings – Single family houses		RES_SINGLE_ 1991-2000_F_LIG
Period of construction:	1991-2000		
Climatic zone:	F	Number of records:	6

Description:	Data sources:
External walls: no data available Roof slabs: no data available	EPC databases (100%)

|	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Q2 (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	-	-	-	-	-
	Heated gross volume	$V_{H;g}$	m³	-	-	-	-	-
	Heated net volume	$V_{H;n}$	m³	-	-	-	-	-
	Compactness ratio	$A_{env}/V_{H;g}$	m⁻¹	0.71	0.31	0.45	0.72	1.00
	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)	1.35	1.11	0.34	1.18	2.54
	External walls type			-				
	U-value of the wall	U_{wl}	W/(m²·K)	1.16	0.96	0.43	0.87	2.17
	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)	4.42	0.68	3.76	4.46	5.07
	Shading system type			-				
GAINS and VENTILATION	Occupancy density *	O_C	person/m²	UNI EN 16798-1 - Table A.19				
	Lighting power density *	W_L	W/m²	UNI EN 16798-1 - A.8.3				
	Equipment power density *	W_A	W/m²	UNI EN 16798-1 - A.8.3				
	Type of ventilation			Natural: 100%				
	Air exchange rate *	n	h⁻¹	0.30	0.00	0.30	0.30	0.30
THERMAL SYSTEMS	Heating system type			-				
	Heating generator			Traditional boiler: 34%; Fireplace: 33%; Unknown: 33%				
	Daily operating time of the heating system *			No limitations				
	Energy carrier			Unknown: 32%; Gas Oil: 17%; Electricity and natural gas: 17%; Electricity and solid biomass: 17%; Solid biomass: 17%				
	Heating emission sub-system			Radiators: 67%; Unknown: 33%				
	Cooling system type			-				
	Daily operating time of the cooling system *	t_C	h	-	-	-	-	-
	Cooling emission sub-system			-				
	DHW system type			-				
	DHW generator			Electric boiler: 50%; Unknown: 50%				
	* These values were not available in the considered sources, and are thus derived from UNI EN Standards							

Region:	Liguria		Archetype code:
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Period of construction:	1991-2000		1991-2000_F_LIG
Climatic zone:	F	Number of records: 6	

Numerical variables – GEOMETRY

COMPACTNESS RATIO
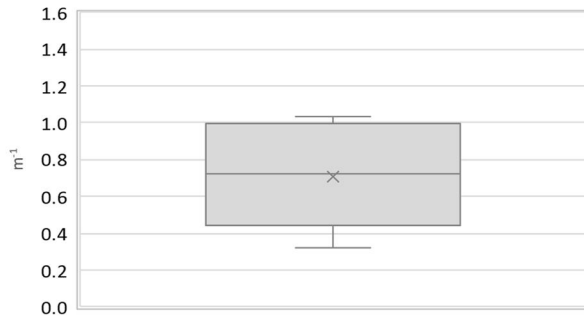
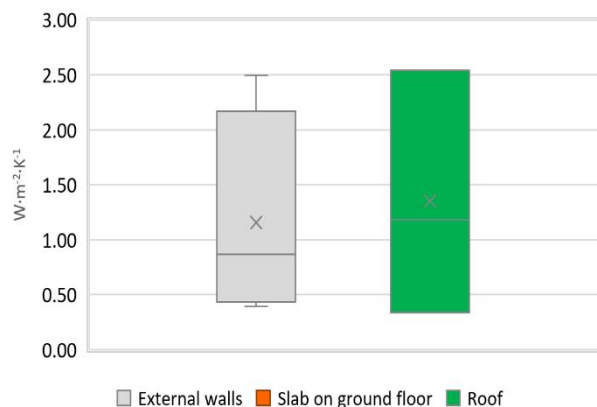### WINDOWS TO WALL RATIO
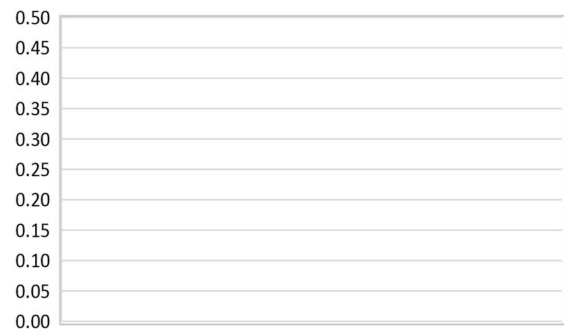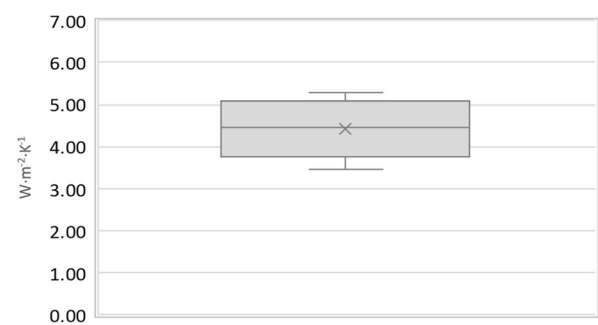

☐ WWR_N ☐ WWR_S ☐ WWR_E ☐ WWR_W ☐ Awi/Ause

Numerical variables – ENVELOPE

OPAQUE BUILDING COMPONENTS U-VALUE
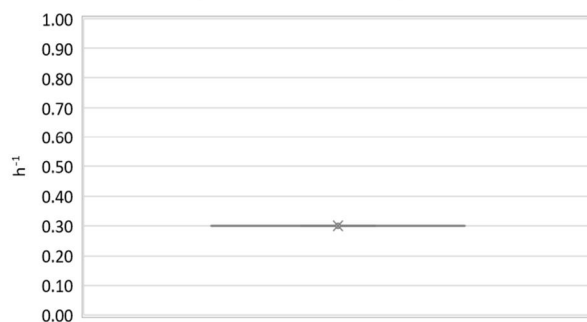

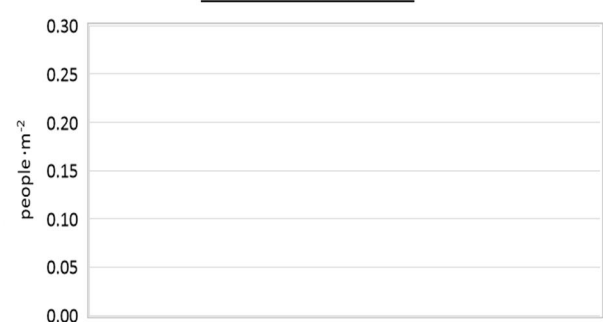☐ External walls ☐ Slab on ground floor ☐ Roof

WINDOWS U-VALUE

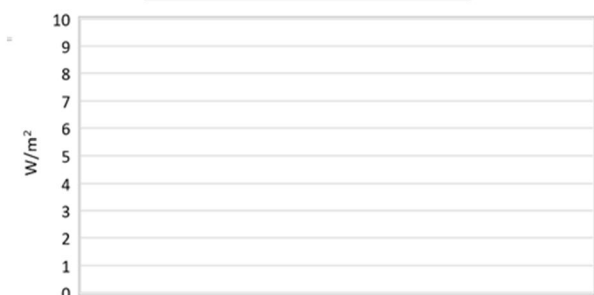## Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE (Standard Values)

AIR EXCHANGE RATE

OCCUPANCY DENSITY

INTERNAL GAINS POWER DENSITY

DAILY OPERATING TIME

☐ Heating ☐ Cooling

Region:	Liguria		Archetype code:
Building category:	Residential buildings – Single family houses		RES_SINGLE_
Period of construction:	1991-2000		1991-2000_F_LIG
Climatic zone:	F	Number of records: 6	

	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)
GEOMETRY: apartments	Inter-storey height	H_n	m	3.3	0.7	2.9	3.1	3.7
	Heated gross floor area	$A_{H;g}$	m^2	-	-	-	-	-
	Heated net floor area	$A_{H;n}$	m^2	109.2	66.8	73.0	86.8	136.4
	Heated gross volume	$V_{H;g}$	m^3	433.8	266.4	267.4	353.5	562.0
	Heated net volume	$V_{H;n}$	m^3	326.9	192.4	179.9	254.7	487.3
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	20.2	9.5	10.0	22.0	28.7
	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	-	-	-	-	-
	Temperature of DHW	θ_W	°C	-	-	-	-	-
	DHW system power *	$P_{W;gen}$	kW	11.4	13.8	1.4	1.5	26.4
	* These values refer to the apartment scale							

ADDITIONAL DATA

Additional data: GEOMETRY (the plots refer to the apartment scale)
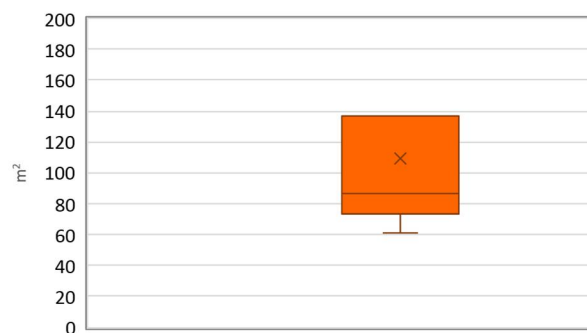
NUMBER OF FLOORS

GROSS HEIGHT
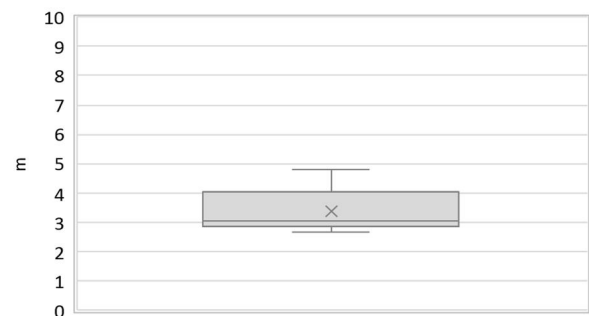
AREA

### VOLUME

☐ Heated gross floor area ■ Heated net floor area
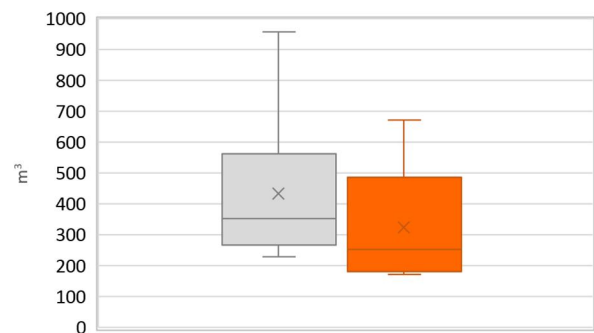
☐ Heated gross volume ■ Heated net volume

Region:	Liguria	Archetype code:
Building category:	Residential buildings – Single family houses	RES_SINGLE_
Period of construction:	1991-2000	1991-2000_F_LIG
Climatic zone:	F	Number of records:	6	

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

DHW SUPPLY TEMPERATURE

SYSTEM POWER
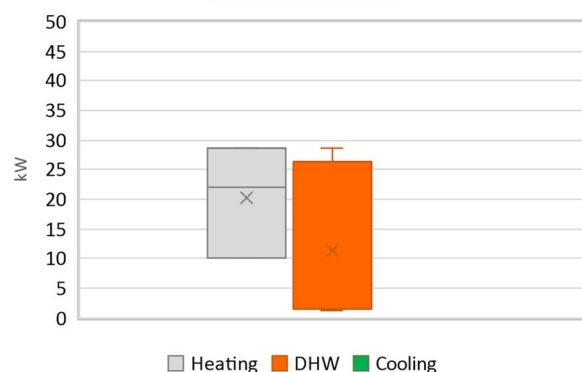
CO₂ EMISSION
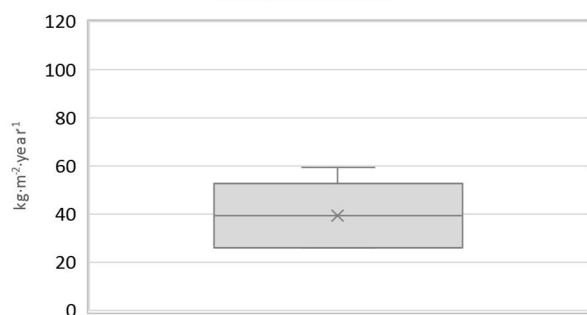
HEATING SYSTEM INSTALLATION YEAR

NON-RENEWABLE PRIMARY ENERGY USE
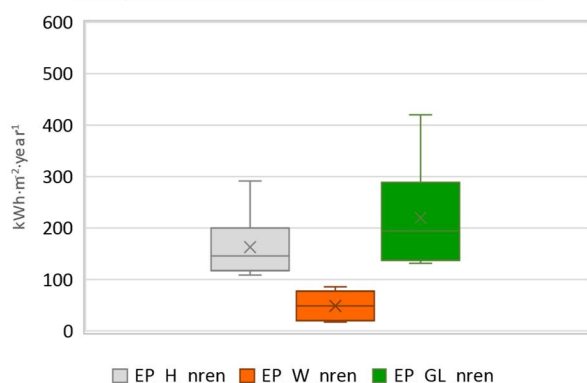
RENEWABLE PRIMARY ENERGY USE
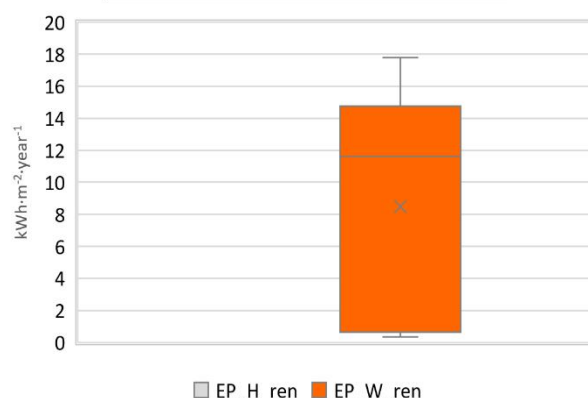
NOTE: Sample size of the analysed data.

Compactness ratio: 6; U-value of the roof: 3; U-value of the wall: 4; U-value of the windows: 6; Inter-storey height: 6; Heated net floor area: 6; Heated gross volume: 6; Heated net volume: 6; Total heating power: 3; DHW system power: 5; CO2 Emission: 5; EP_H_nren: 6; EP_W_nren: 6; EP_GL_nren: 6; EP_W_ren: 5