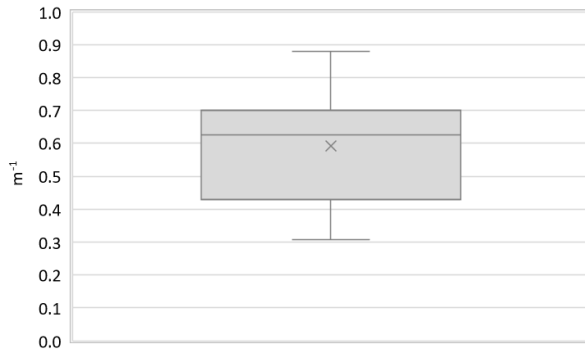


Region:	Calabria					Archetype code: RES_APPBLOCK_ 1961-1970_E_CAL		
Building category:	Residential buildings – Apartments (in multifamily blocks)							
Period of construction:	1961-1970							
Climatic zone:	E	Number of records:			49			
Description (the codes associated with walls and slabs refer to the structures described in UNI/TR 11552:2014): External walls: double layer of hollow bricks (12 cm + 12 cm) with uninsulated air gap (cod. MCV01). Roof slabs: no data available						Data sources: Survey data (47%) EPC databases (15%) Expert assumptions (11%) Others (27%) #		
	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)
BUILDING GEOMETRY	Number of floors	n_f	-	1.78	0.87	1.00	2.00	2.00
	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	-	-	-	-	-
	Heated gross volume	$V_{H,g}$	m ³	-	-	-	-	-
	Heated net volume	$V_{H,n}$	m ³	-	-	-	-	-
	Compactness ratio	$A_{\text{env}}/V_{H,g}$	m ⁻¹	0.59	0.16	0.43	0.63	0.70
	WWR – North orientation	WWR_N	-	0.19	0.14	0.08	0.16	0.27
	WWR – South orientation	WWR_S	-	0.16	0.09	0.08	0.17	0.20
	WWR – East orientation	WWR_E	-	0.23	0.14	0.13	0.22	0.30
	WWR – West orientation	WWR_W	-	0.20	0.12	0.07	0.21	0.31
	Window to useful floor area ratio	A_{wi}/A_{use}	-	0.15	0.05	0.11	0.14	0.19
	ENVELOPE	Roof type	-					
U-value of the roof		$U_{f,\text{up}}$	W/(m ² ·K)	1.16	0.58	0.52	1.23	1.66
External walls type		Hollow brick masonry: 47%, Concrete wall: 25%, Solid brick masonry: 10%, Masonry with local stones: 6%, Medium density stone masonry (dry density from 1300 to 2000 kg/m ³): 2%, Unknown: 10%						
U-value of the wall		U_{wl}	W/(m ² ·K)	0.93	0.51	0.44	0.98	1.29
Slab on ground floor type		-						
U-value of the floor		$U_{f,lw}$	W/(m ² ·K)	1.21	0.37	1.10	1.29	1.38
Windows type		Double glazing, wooden frame: 29%, Double glazing, aluminum frame with thermal break: 24%, Double glazing, aluminum frame, no thermal break: 18%, Double glazing, PVC frame: 11%, Single glazing, wooden frame: 10%, Single glazing, aluminum frame: 8%						
U-value of the windows		U_W	W/(m ² ·K)	3.38	1.16	2.80	2.95	3.70
GAINS and VENTILATION	Shading system type	Shutter: 42%, Roller blinds: 40%, No shading: 8%, Curtains: 5%, Unknown: 5%						
	Occupancy density	O_C	person/m ²	0.036	0.013	0.022	0.036	0.050
	Lighting power density	W_L	W/m ²	4.36	2.66	2.17	3.71	6.27
	Equipment power density *	W_A	W/m ²	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	Autonomous: 96%, Centralized: 4%						
	Heating generator	Traditional Boiler: 53%, Fireplace: 35%, Condensing Boiler: 8%, Unknown: 4%						
	Daily operating time of the heating system	t_H	h	8.56	3.88	6.00	8.00	10.00
	Energy carrier	Natural Gas: 51%, Solid biomass: 35%, Electricity: 8%, LPG: 2%, Unknown: 4%						
	Heating emission sub-system	Radiators: 95%, Fan coil: 5%						
	Cooling system type	Absent: 100%						
	Daily operating time of the cooling system	t_C	h	-	-	-	-	-
	Cooling emission sub-system	-						
	DHW system type	Autonomous, coupled with heating: 64%, Autonomous, detached from heating: 36%						
	DHW generator	Natural gas boiler: 64%, Electric boiler: 36%						
	# Standards (11%), Measured data (10%), Municipal database (6%).							
* These values were not available in the considered sources, and are thus derived from UNI EN Standards								

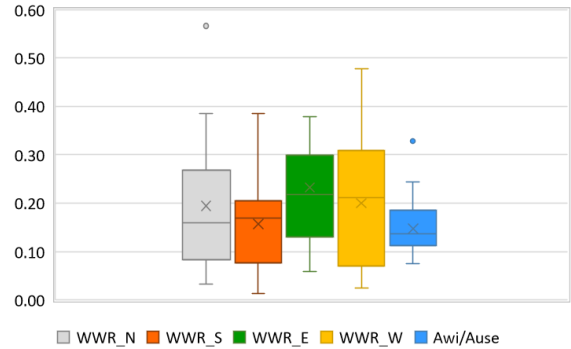
Region:	Calabria	Archetype code: RES_APPBLOCK_ 1961-1970_E_CAL
Building category:	Residential buildings – Apartments (in multifamily blocks)	
Period of construction:	1961-1970	
Climatic zone:	E	
Number of records:		49

Numerical variables – GEOMETRY

COMPACTNESS RATIO

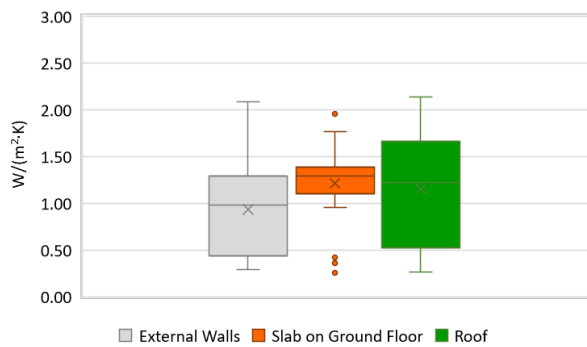


WINDOWS TO WALL RATIO

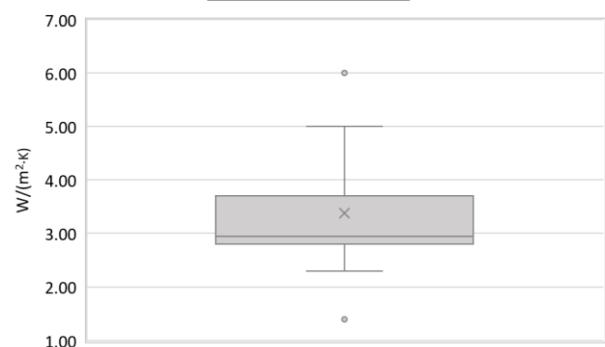


Numerical variables – ENVELOPE

OPAQUE BUILDING COMPONENTS U-VALUE



WINDOWS U-VALUE

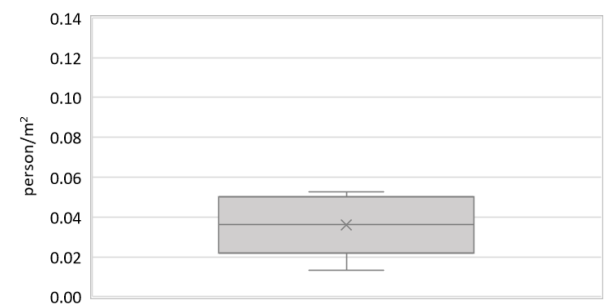


Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE

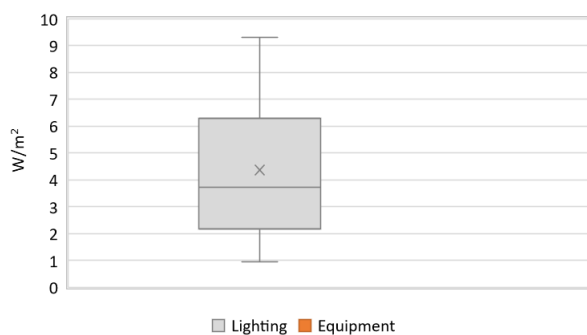
AIR EXCHANGE RATE



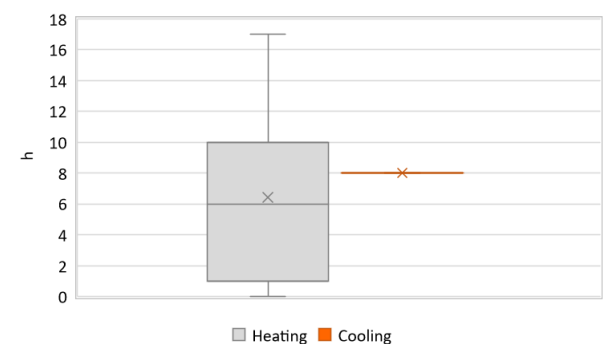
OCCUPANCY DENSITY



INTERNAL GAINS POWER DENSITY



DAILY OPERATING TIME

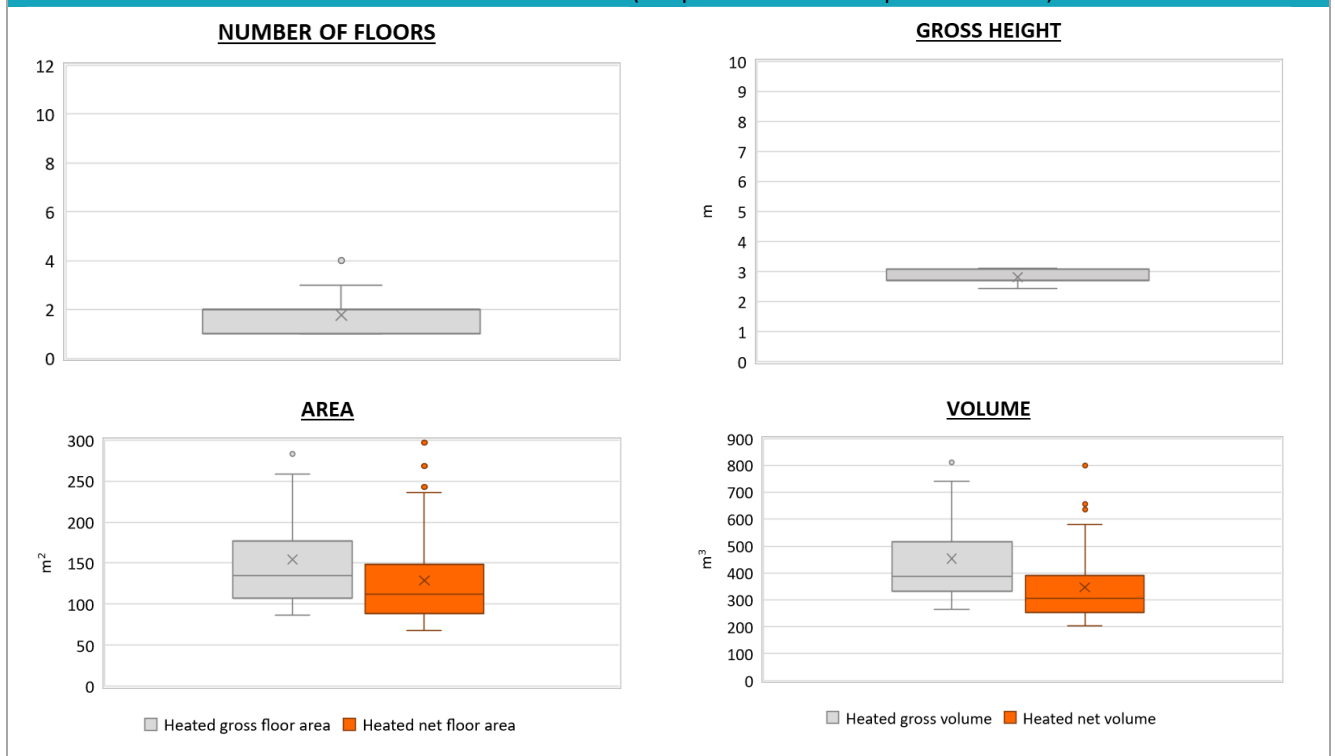


Region:	Calabria			Archetype code: RES_APPBLOCK_ 1961-1970_E_CAL
Building category:	Residential buildings – Apartments (in multifamily blocks)			
Period of construction:	1961-1970			
Climatic zone:	E	Number of records:	49	

ADDITIONAL DATA								
	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	2.82	0.18	2.70	2.70	3.08
	Heated gross floor area	$A_{H,g}$	m ²	154.64	64.03	107.47	134.32	176.83
	Heated net floor area	$A_{H,n}$	m ²	128.83	55.02	88.24	112.53	148.62
	Heated gross volume	$V_{H,g}$	m ³	453.38	174.95	332.94	387.79	515.06
	Heated net volume	$V_{H,n}$	m ³	346.60	134.39	253.98	306.19	389.99
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	23.44	8.42	23.00	24.00	28.00
	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	-	-	-	-	-
	Temperature of DHW	θ_w	°C	40.00	0.00	40.00	40.00	40.00
	DHW system power *	$P_{W,gen}$	kW	13.53	11.69	1.50	18.00	24.00

* These values refer to the apartment scale

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



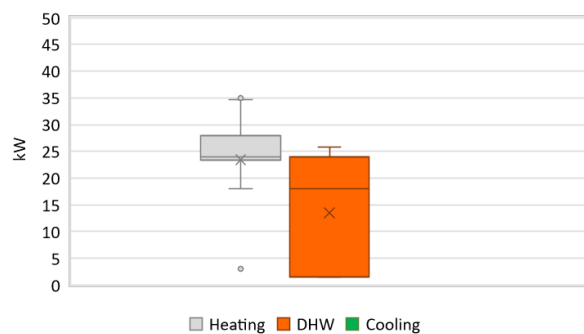
Region:	Calabria	Archetype code: RES_APPBLOCK_ 1961-1970_E_CAL
Building category:	Residential buildings – Apartments (in multifamily blocks)	
Period of construction:	1961-1970	
Climatic zone:	E	
Number of records:		49

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

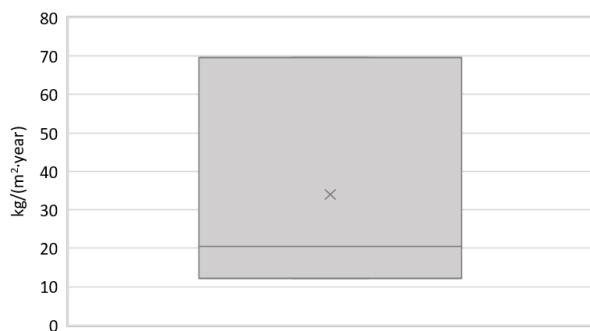
DHW SUPPLY TEMPERATURE



SYSTEM POWER



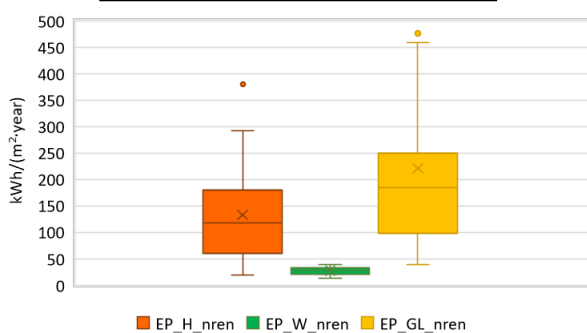
CO₂ EMISSION



HEATING SYSTEM INSTALLATION YEAR



NON-RENEWABLE PRIMARY ENERGY USE



RENEWABLE PRIMARY ENERGY USE

