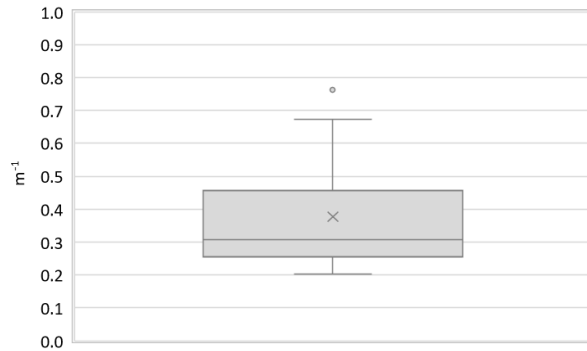


Region:		Calabria					Archetype code: RES_APPBLOCK_ 2001-2010_C_CAL		
Building category:		Residential buildings – Apartments (in multifamily blocks)							
Period of construction:		2001-2010							
Climatic zone:		C	Number of records:		25				
Description (the codes associated with walls and slabs refer 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 (52%) Measured data (16%) Expert assumptions (12%) Others (20%) #		
	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)	
BUILDING GEOMETRY	Number of floors	$n_f$	-	2.12	1.72	1.00	1.00	3.00	
	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>	-	-	-	-	-	
	Heated gross volume	$V_{H,g}$	m <sup>3</sup>	-	-	-	-	-	
	Heated net volume	$V_{H;n}$	m <sup>3</sup>	-	-	-	-	-	
	Compactness ratio	$A_{\text{env}}/V_{H,g}$	m <sup>-1</sup>	0.38	0.17	0.26	0.31	0.46	
	WWR – North orientation	$WWR_N$	-	0.21	0.13	0.10	0.17	0.32	
	WWR – South orientation	$WWR_S$	-	0.21	0.18	0.06	0.20	0.28	
	WWR – East orientation	$WWR_E$	-	0.21	0.13	0.10	0.23	0.28	
	WWR – West orientation	$WWR_W$	-	0.19	0.11	0.10	0.15	0.24	
	Window to useful floor area ratio	$A_{wi}/A_{\text{use}}$	-	0.16	0.06	0.12	0.17	0.19	
	ENVELOPE	Roof type	-						
U-value of the roof		$U_{fi;up}$	W/(m <sup>2</sup> ·K)	1.00	0.71	0.36	0.75	1.42	
External walls type		Hollow brick masonry: 100%							
U-value of the wall		$U_{wl}$	W/(m <sup>2</sup> ·K)	0.74	0.48	0.50	0.57	1.00	
Slab on ground floor type		-							
U-value of the floor		$U_{fi;lw}$	W/(m <sup>2</sup> ·K)	1.05	0.70	0.45	0.92	1.46	
Windows type		Double glazing, wooden frame: 28%, Double glazing, aluminum frame with thermal break: 24%, Double glazing, PVC frame: 24%, Double glazing, aluminum frame, no thermal break: 20%, Triple glazing, aluminum frame with thermal break: 4%,							
U-value of the windows		$U_W$	W/(m <sup>2</sup> ·K)	3.79	1.14	2.85	3.14	4.95	
Shading system type	Roller blinds: 52%, Shutter: 36%, Curtains: 12%								
GAINS and VENTILATION	Occupancy density	$O_C$	person/m <sup>2</sup>	0.034	0.016	0.022	0.032	0.044	
	Lighting power density *	$W_L$	W/m <sup>2</sup>	UNI EN 16798-1 - A.8.3					
	Equipment power density *	$W_A$	W/m <sup>2</sup>	UNI EN 16798-1 - A.8.3					
	Type of ventilation	Natural: 100%							
	Air exchange rate *	$n$	h <sup>-1</sup>	0.30	0.00	0.30	0.30	0.30	
THERMAL SYSTEMS	Heating system type	Autonomous: 100%							
	Heating generator	Traditional Boiler: 76%, Condensing Boiler: 16%, Fireplace: 4%, Unknown: 4%							
	Daily operating time of the heating system *	$t_H$	h	8.00	0.00	8.00	8.00	8.00	
	Energy carrier	Natural Gas: 84%, LPG: 4%, Solid biomass: 4%, Unknown: 4%							
	Heating emission sub-system	Radiators: 88%, Fan coil: 8%, Unknown: 4%							
	Cooling system type	Absent: 96%, Air-cooled chiller: 4%							
	Daily operating time of the cooling system *	$t_C$	h	8.00	0.00	8.00	8.00	8.00	
	Cooling emission sub-system	Fan coil: 100%							
	DHW system type	-							
	DHW generator	-							
	# Standards (8%), Municipal database (8%), EPC database (4%).								
	* These values were not available in the considered sources, and are thus derived from UNI EN Standards								

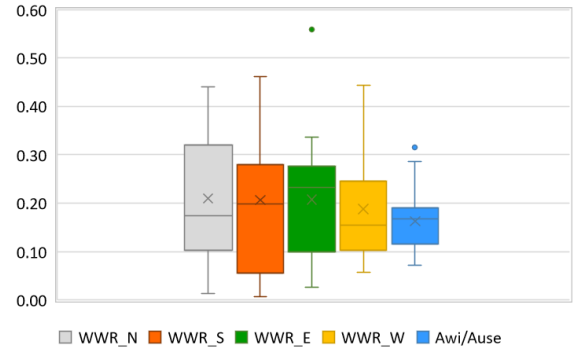
<b>Region:</b>	Calabria	<b>Archetype code:</b> RES_APPBLOCK_ 2001-2010_C_CAL
<b>Building category:</b>	Residential buildings – Apartments (in multifamily blocks)	
<b>Period of construction:</b>	2001-2010	
<b>Climatic zone:</b>	C	
<b>Number of records:</b>		25

### Numerical variables – GEOMETRY

**COMPACTNESS RATIO**

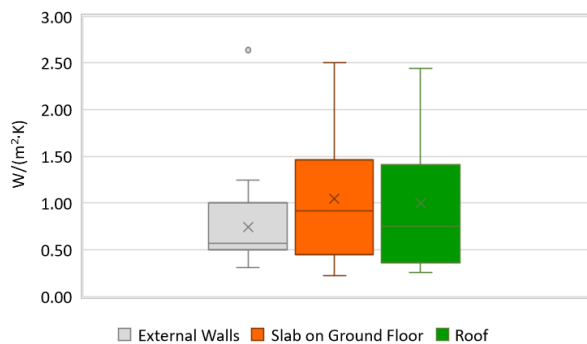


**WINDOWS TO WALL RATIO**

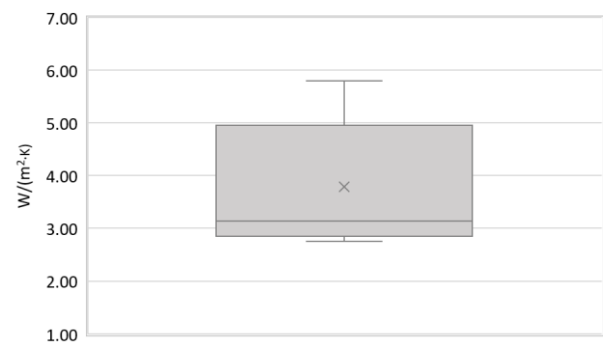


### Numerical variables – ENVELOPE

**OPAQUE BUILDING COMPONENTS U-VALUE**



**WINDOWS U-VALUE**

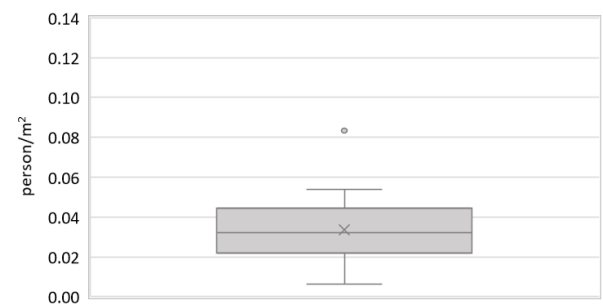


### Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE

**AIR EXCHANGE RATE**



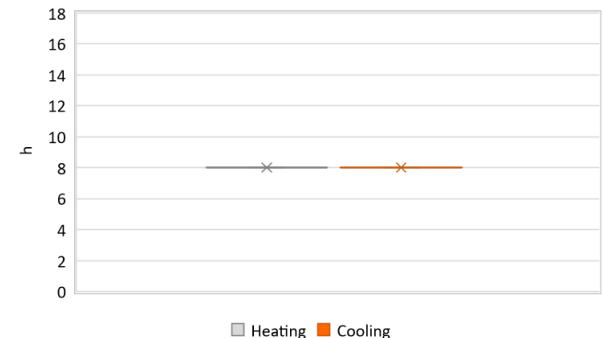
**OCCUPANCY DENSITY**



**INTERNAL GAINS POWER DENSITY**



**DAILY OPERATING TIME**

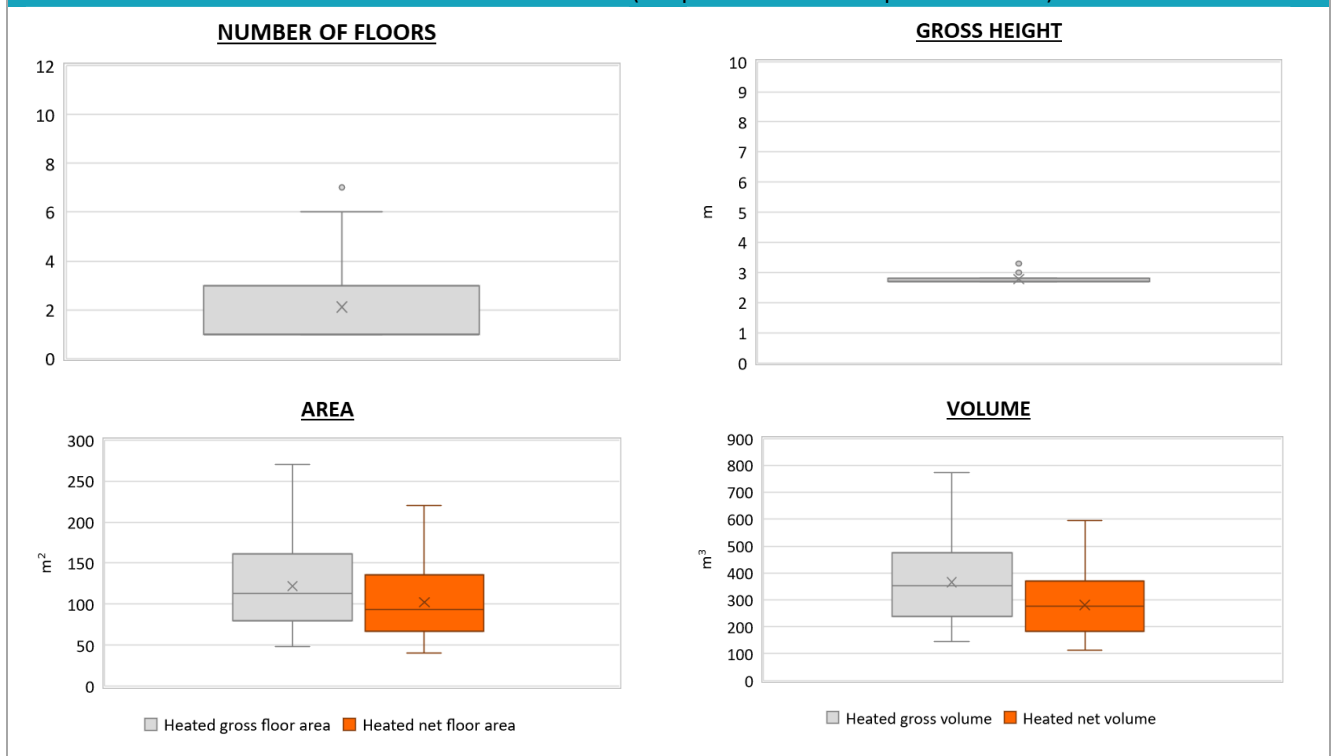


Region:	Calabria			Archetype code: RES_APPBLOCK_ 2001-2010_C_CAL
Building category:	Residential buildings – Apartments (in multifamily blocks)			
Period of construction:	2001-2010			
Climatic zone:	C	Number of records:	25	

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	2.78	0.15	2.70	2.70	2.80
	Heated gross floor area	$A_{H,g}$	m <sup>2</sup>	167.91	123.96	82.79	124.03	185.20
	Heated net floor area	$A_{H,n}$	m <sup>2</sup>	140.70	103.73	69.72	102.35	156.50
	Heated gross volume	$V_{H,g}$	m <sup>3</sup>	517.58	409.88	244.42	381.02	559.26
	Heated net volume	$V_{H,n}$	m <sup>3</sup>	397.44	314.44	188.24	286.20	430.70
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	25.64	2.83	24.00	24.20	27.30
	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	$\theta_w$	°C	40.00	0.00	40.00	40.00	40.00
	DHW system power	$P_{W,gen}$	kW	-	-	-	-	-

\* These values refer to the apartment scale

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



<b>Region:</b>	Calabria	<b>Archetype code:</b> RES_APPBLOCK_ 2001-2010_C_CAL
<b>Building category:</b>	Residential buildings – Apartments (in multifamily blocks)	
<b>Period of construction:</b>	2001-2010	
<b>Climatic zone:</b>	C	
<b>Number of records:</b>		25

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

