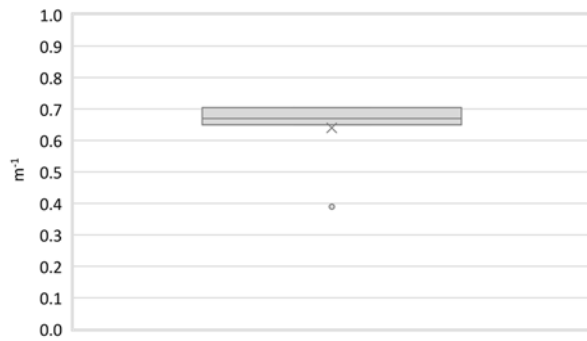


Region:	Sicily						Archetype code: RES_APPBLOCK_ 1981-1990_B_SIC		
Building category:	Residential buildings – Apartments (in multifamily blocks)								
Period of construction:	1981-1990								
Climatic zone:	B	Number of records:				7			
Description (the codes associated with walls and slabs refer to the structures described in UNI/TR 11552:2014): External walls: double layer of hollow bricks (8 cm + 12 cm) with uninsulated air gap (cod. MCV01). Roof slabs: reinforced brick-concrete slab (22 cm) plus uninsulated concrete screed (4 cm) (cod. SOL04)							Data sources: Survey data (62%) Expert assumptions (21%) Municipal database (3%) Others (14%) #		
	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)	
BUILDING GEOMETRY	Number of floors	n_f	-	2.42	0.53	2.00	2.00	3.00	
	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	0.64	0.11	0.65	0.67	0.70	
	WWR – North orientation	WWR_N	-	0.26	0.05	0.21	0.30	0.31	
	WWR – South orientation	WWR_S	-	0.26	0.05	0.22	0.26	0.30	
	WWR – East orientation	WWR_E	-	0.04	0.00	0.04	0.04	0.04	
	WWR – West orientation	WWR_W	-	0.10	0.06	0.04	0.15	0.15	
	Window to useful floor area ratio	A_{wi}/A_{use}	-	0.22	0.01	0.21	0.22	0.24	
	ENVELOPE	Roof type	Reinforced brick-concrete slab: 100%						
U-value of the roof		$U_{fi;up}$	W/(m ² ·K)	1.65	0.13	1.57	1.57	1.80	
External walls type		Hollow brick masonry: 100%							
U-value of the wall		U_{wi}	W/(m ² ·K)	0.98	0.00	0.98	0.98	0.99	
Slab on ground floor type		Reinforced brick-concrete slab: 100%							
U-value of the floor		$U_{fi;lw}$	W/(m ² ·K)	1.33	0.11	1.30	1.40	1.40	
Windows type		Single glazing, aluminium frame: 100%							
U-value of the windows		U_W	W/(m ² ·K)	5.86	0.07	5.78	5.92	5.92	
Shading system type		Shutter: 100%							
GAINS and VENTILATION	Occupancy density *	O_C	person/m ²	UNI EN 16798-1 – Table A.19					
	Lighting power density *	W_L	W/m ²	UNI EN 16798-1 – A.8.3					
	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: 71%, Absent: 29%							
	Heating generator	Air source heat pump: 100%							
	Daily operating time of the heating system *	t_H	h	8.00	0.00	8.00	8.00	8.00	
	Energy carrier	Electricity: 100%							
	Heating emission sub-system	Fan coil: 100%							
	Cooling system type	Air-cooled chiller: 71%, Absent: 29%							
	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	Autonomous - detached from heating: 100%							
	DHW generator	Electric boiler: 100%							
	# Standards (14%). * These values were not available in the considered sources, and are thus derived from UNI EN Standards								

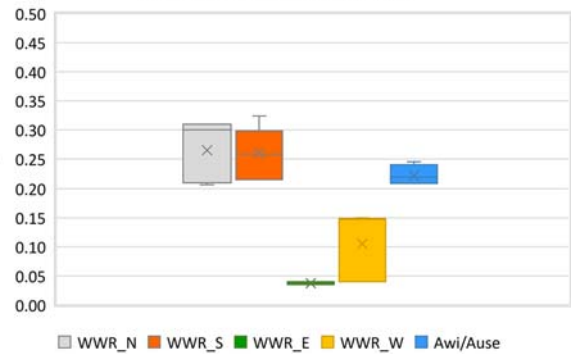
Region:	Sicily	Archetype code: RES_APPBLOCK_ 1981-1990_B_SIC
Building category:	Residential buildings – Apartments (in multifamily blocks)	
Period of construction:	1981-1990	
Climatic zone:	B	
Number of records:		7

Numerical variables – GEOMETRY

COMPACTNESS RATIO

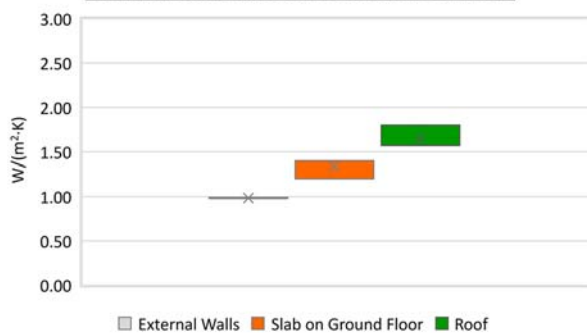


WINDOWS TO WALL RATIO

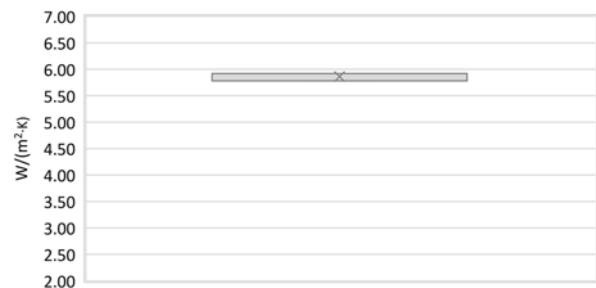


Numerical variables – ENVELOPE

OPAQUE BUILDING COMPONENTS U-VALUE



WINDOWS U-VALUE



Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE

AIR EXCHANGE RATE



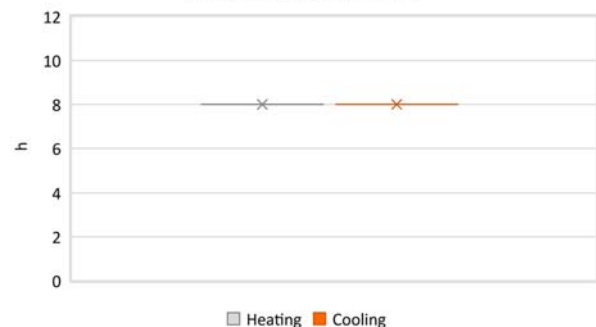
OCCUPANCY DENSITY



INTERNAL GAINS POWER DENSITY



DAILY OPERATING TIME

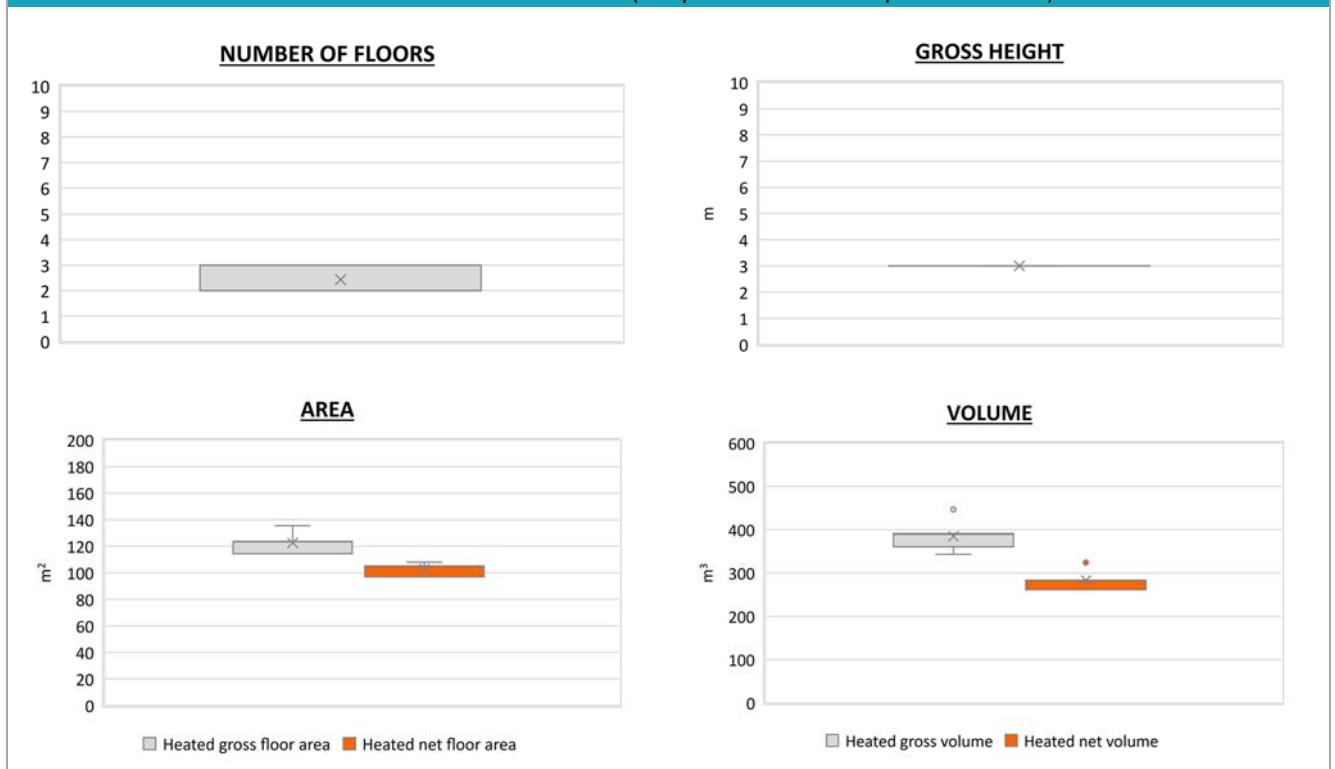


Region:	Sicily	Archetype code: RES_APPBLOCK_ 1981-1990_B_SIC
Building category:	Residential buildings – Apartments (in multifamily blocks)	
Period of construction:	1981-1990	
Climatic zone:	B	
Number of records:		7

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	3.00	0.00	3.00	3.00	3.00
	Heated gross floor area	$A_{H,g}$	m ²	122.65	7.10	118.95	123.40	123.70
	Heated net floor area	$A_{H,n}$	m ²	103.07	4.37	96.90	104.70	105.10
	Heated gross volume	$V_{H,g}$	m ³	384.92	32.83	365.78	389.59	391.48
	Heated net volume	$V_{H,n}$	m ³	282.93	20.91	272.18	282.78	283.74
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	5.00	0.00	5.00	5.00	5.00
	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	5.00	0.00	5.00	5.00	5.00
	Temperature of DHW	θ_w	°C	40.00	0.00	40.00	40.00	40.00
	DHW system power *	$P_{W,gen}$	kW	1.20	0.00	1.20	1.20	1.20

* These values refer to the apartment scale

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



Region:	Sicily	Archetype code: RES_APPBLOCK_ 1981-1990_B_SIC
Building category:	Residential buildings – Apartments (in multifamily blocks)	
Period of construction:	1981-1990	
Climatic zone:	B	
Number of records:		7

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

