Region:	Sicily			**Archetype code:** RES_APPBLOCK_ 1961-1970_B_SIC
Building category:	Residential buildings – Apartments (in multifamily blocks)			
Period of construction:	1961-1970			
Climatic zone:	B	**Number of records:**	92	

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 (40%)
Expert assumptions (35%)
Municipal database (11%)
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	-	7.63	2.11	6.00	6.00	10.00
	Gross height	H_g	m	-	-	-	-	-
	Footprint area	$A_{footprint}$	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	$A_{env}/V_{H;g}$	m^{-1}	0.38	0.15	0.27	0.33	0.39
	WWR – North orientation	WWR_N	-	0.22	0.08	0.13	0.23	0.29
	WWR – South orientation	WWR_S	-	0.25	0.03	0.24	0.25	0.27
	WWR – East orientation	WWR_E	-	0.27	0.12	0.20	0.29	0.44
	WWR – West orientation	WWR_W	-	0.19	0.12	0.06	0.19	0.36
	Window to useful floor area ratio	A_{wi}/A_{use}	-	0.17	0.04	0.15	0.16	0.21
ENVELOPE	Roof type	Reinforced brick-concrete slab: 100%						
	U-value of the roof	$U_{fl;up}$	W/(m²·K)	1.34	0.60	0.56	1.62	1.85
	External walls type	Hollow brick masonry: 100%						
	U-value of the wall	U_{wl}	W/(m²·K)	1.02	0.07	0.95	0.99	1.10
	Slab on ground floor type	Reinforced brick-concrete slab: 100%						
	U-value of the floor	$U_{fl;lw}$	W/(m²·K)	1.59	0.18	1.55	1.55	1.80
	Windows type	Single glazing, aluminium frame: 50%, Double glazing, aluminium frame with thermal break: 44%, Double glazing, PVC frame: 3%, Double glazing, aluminium frame, no thermal break: 3%						
	U-value of the windows	U_W	W/(m²·K)	4.70	1.18	3.60	4.30	5.92
	Shading system type	Shutter: 100%						
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	Autonomous: 72%, Absent: 28%						
	Heating generator	Traditional boiler: 68%, Air source heat pump: 32%						
	Daily operating time of the heating system *	t_H	h	8.00	0.00	8.00	8.00	8.00
	Energy carrier	Natural gas: 68%, Electricity: 32%						
	Heating emission sub-system	Radiators: 68%, Fan coil: 32%						
	Cooling system type	Air-cooled chiller: 70%, Absent: 30%						
	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 - coupled with heating: 50%, Autonomous - detached from heating: 50%						
	DHW generator	Natural gas boiler: 52%, Electric boiler: 48%						

Standards (13%), Simulation (1%).
* These values were not available in the considered sources, and are thus derived from UNI EN Standards

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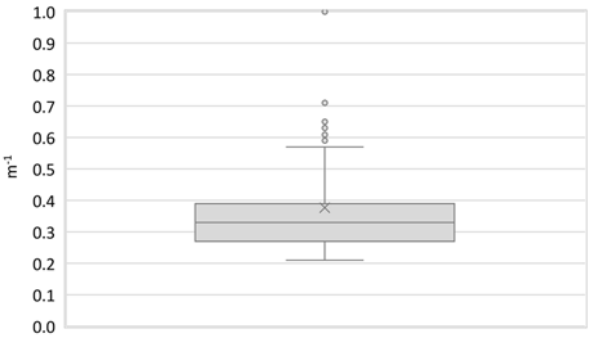
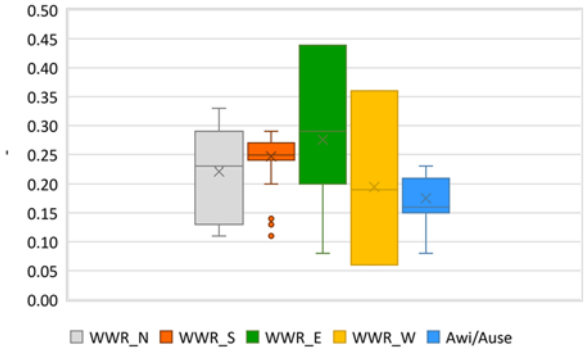
Numerical variables – GEOMETRY

COMPACTNESS RATIO



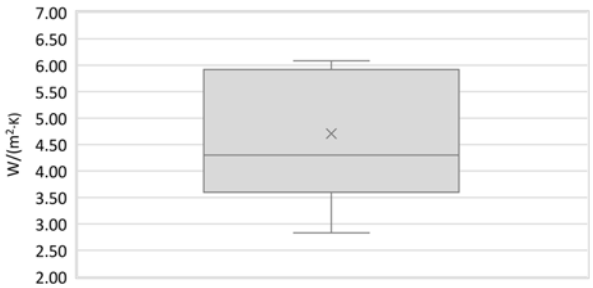
WINDOWS TO WALL RATIO



Numerical variables – ENVELOPE

OPAQUE BUILDING COMPONENTS U-VALUE

WINDOWS U-VALUE



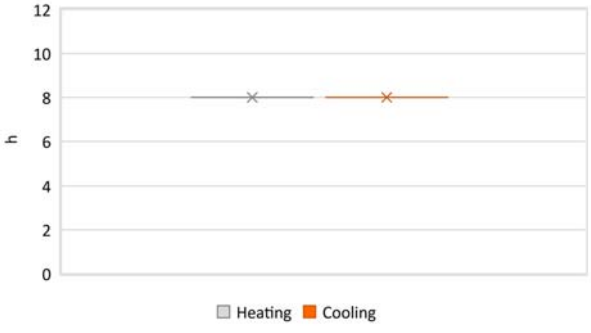
Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE

AIR EXCHANGE RATE

OCCUPANCY DENSITY

INTERNAL GAINS POWER DENSITY

DAILY OPERATING TIME



Region:	Sicily			**Archetype code:**
Building category:	Residential buildings – Apartments (in multifamily blocks)			RES_APPBLOCK_ 1961-1970_B_SIC
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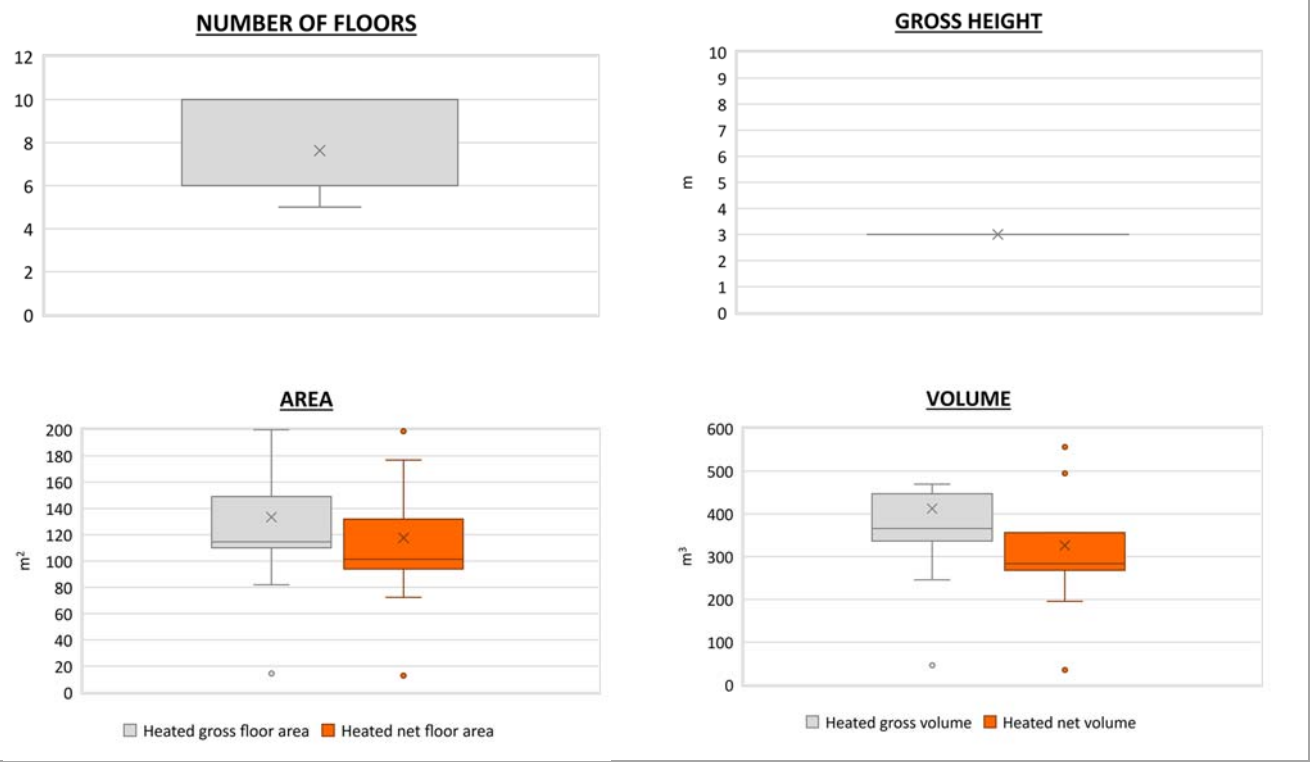
ADDITIONAL DATA

	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	3.01	0.00	3.00	3.00	3.10
	Heated gross floor area	$A_{H;g}$	m^2	133.33	45.52	110.00	114.55	149.10
	Heated net floor area	$A_{H;n}$	m^2	117.57	40.47	94.00	101.30	131.87
	Heated gross volume	$V_{H;g}$	m^3	412.39	143.16	336.60	365.55	447.30
	Heated net volume	$V_{H;n}$	m^3	325.81	114.63	267.95	283.64	356.12
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	15.75	7.17	9.20	20.00	20.00
	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	3.48	2.72	2.30	2.30	2.30
	Temperature of DHW	θ_W	°C	40.00	0.00	40.00	40.00	40.00
	DHW system power *	$P_{W;gen}$	kW	10.81	9.45	1.20	10.00	20.00
	* These values refer to the apartment scale							

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



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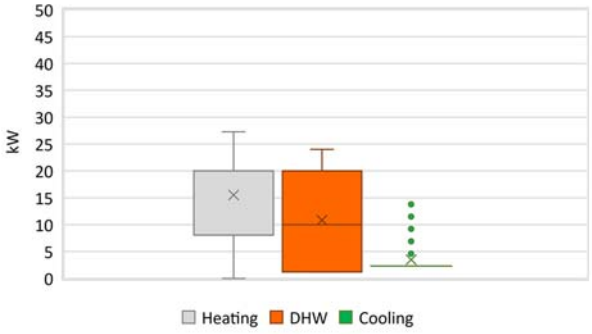
Building category:	Residential buildings – Apartments (in multifamily blocks)			RES_APPBLOCK_ 1961-1970_B_SIC
Period of construction:	1961-1970			
Climatic zone:	B	**Number of records:**	92	

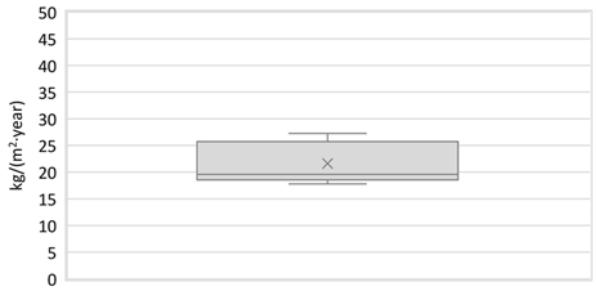
Additional data: other numerical variables that are not included in the archetype

DHW SUPPLY TEMPERATURE

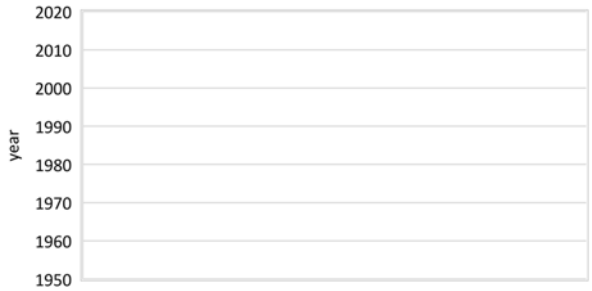
SYSTEM POWER



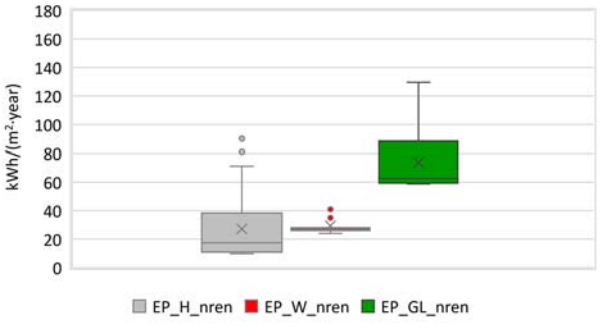
CO_2 EMISSION



HEATING SYSTEM INSTALLATION YEAR



NON-RENEWABLE PRIMARY ENERGY USE



RENEWABLE PRIMARY ENERGY USE