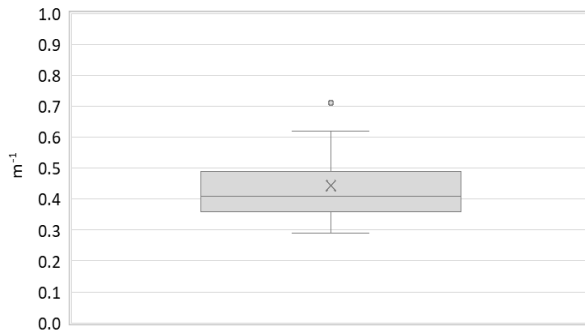


Region:	Apulia						Archetype code: EDUC_ 1961-1970_D-E_APU	
Building category:	Secondary schools short staying							
Period of construction:	1961-1970							
Climatic zone:	D-E	Number of records:				17		
Description (the codes associated with walls and slabs refer to the structures described in UNI/TR 11552:2014): External walls: double layer of hollow bricks with uninsulated air gap (cod. MCV01). Roof slabs: reinforced brick-concrete slab plus uninsulated concrete screed (cod. SOL04)							Data sources: Energy audits (100%)	
	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)
BUILDING GEOMETRY	Number of floors	n_f	-	-	-	-	-	-
	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	4731.86	3125.84	2544.195	4914	6599
	Heated gross volume	$V_{H,g}$	m ³	-	-	-	-	-
	Heated net volume	$V_{H,n}$	m ³	20201.51	14081.16	9561.56	19601.36	27342.77
	Compactness ratio	$A_{\text{env}}/V_{H,g}$	m ⁻¹	0.44	0.11	0.36	0.41	0.49
	WWR – North orientation	WWR_N	-	0.29	0.06	0.25	0.29	0.34
	WWR – South orientation	WWR_S	-	0.29	0.06	0.25	0.29	0.34
	WWR – East orientation	WWR_E	-	0.18	0.07	0.12	0.15	0.25
	WWR – West orientation	WWR_W	-	0.18	0.07	0.12	0.15	0.25
	Window to useful floor area ratio	A_{wi}/A_{use}	-	0.15	0.18	0.06	0.08	0.11
ENVELOPE	Roof type	Unknown: 71%; Reinforced brick-concrete slab: 29%						
	U-value of the roof	$U_{fi,up}$	W/(m ² ·K)	-	-	-	-	-
	External walls type	Hollow brick masonry: 41%; Concrete wall: 29%; Masonry with local stones: 24%; Reinforced brick-concrete wall: 6%.						
	U-value of the wall	U_{wl}	W/(m ² ·K)	1.08	0.81	0.77	0.91	1.03
	Slab on ground floor type	Brick-concrete slab 94%; Masonry with lists of stones and concrete: 6%						
	U-value of the floor	$U_{fi,lw}$	W/(m ² ·K)	1.25	0.48	0.89	1.24	1.56
	Windows type	Double glazing, aluminium frame, no thermal break: 100%						
	U-value of the windows	U_W	W/(m ² ·K)	4.63	1.10	3.75	4.50	5.84
Shading system type	-							
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	-						
	Air exchange rate	n	h ⁻¹	UNI EN 16798-1 – A.3.1				
THERMAL SYSTEMS	Heating system type	Centralized: 100%						
	Heating generator	Traditional boiler 88%; Air source heat pump: 12%						
	Daily operating time of the heating system	t_H	h	8.41	2.74	7.00	8.00	9.00
	Energy carrier	Natural gas: 71%; Unknown 17%; Electricity: 6%; Gas Oil 6%						
	Heating emission sub-system	Radiators: 88%, Fan coil: 12%						
	Cooling system type	Absent: 53%; Air-cooled chiller: 47%						
	Daily operating time of the cooling system	t_C	h	8.88	3.18	7.00	8.00	9.75
	Cooling emission sub-system	Unknown: 59%; Multisplit: 29%; Fan coil: 12%;						
	DHW system type	Absent: 100%						
	DHW generator	-						
	* These values were not available in the considered sources, and are thus derived from UNI EN Standards							

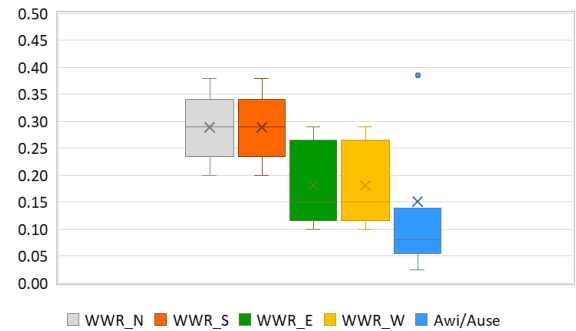
Region:	Apulia	Archetype code: EDUC_ 1961-1970_D-E_APU
Building category:	Secondary school short staying	
Period of construction:	1961-1970	
Climatic zone:	D/E	
Number of records:		17

Numerical variables – GEOMETRY

COMPACTNESS RATIO

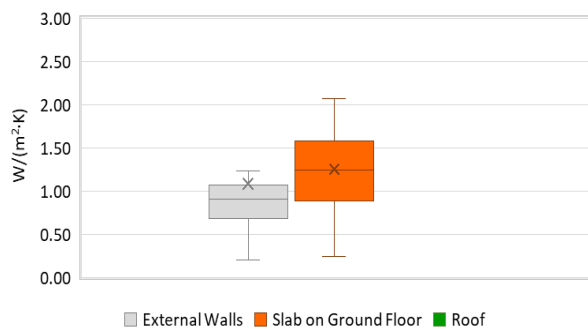


WINDOWS TO WALL RATIO

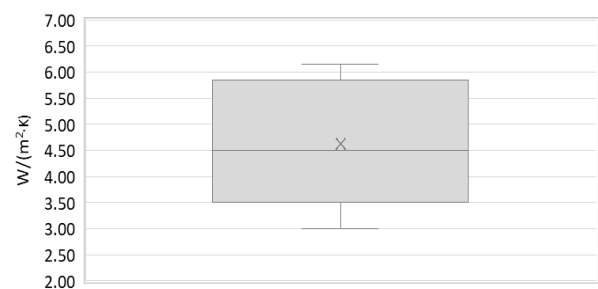


Numerical variables – ENVELOPE

OPAQUE BUILDING COMPONENTS U-VALUE

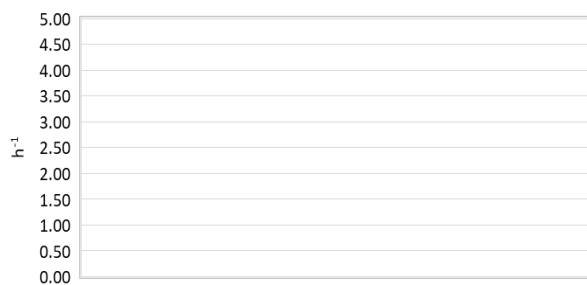


WINDOWS U-VALUE

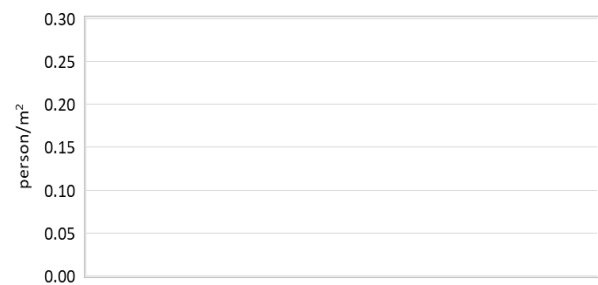


Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE

AIR EXCHANGE RATE



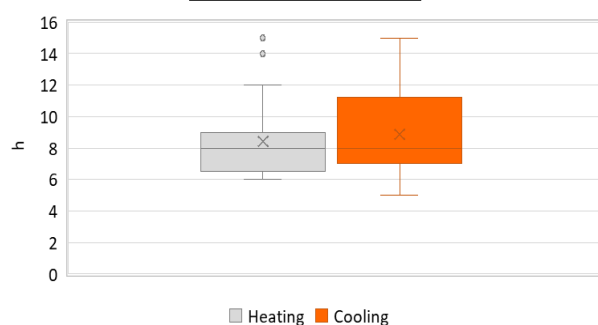
OCCUPANCY DENSITY



INTERNAL GAINS POWER DENSITY



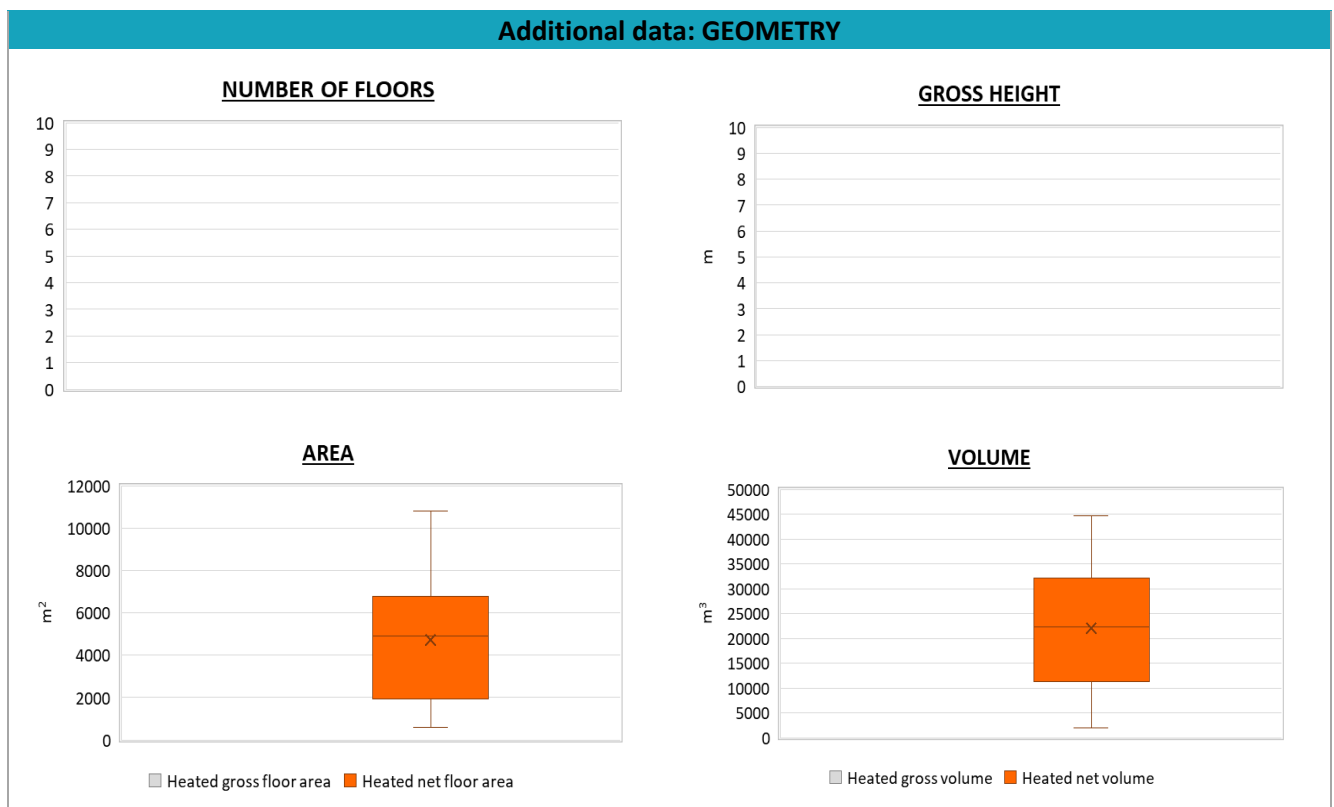
DAILY OPERATING TIME



The data can be used for analysis, modeling, and research purposes, as long as it remains unaltered in its original form. Users are free to publish results based on the data, provided they credit the original source.

Region:	Apulia			Archetype code: EDUC_ 1961-1970_D-E_APU
Building category:	Secondary school short staying			
Period of construction:	1961-1970			
Climatic zone:	D/E	Number of records:	17	

ADDITIONAL DATA								
	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)
GEOMETRY	Inter-storey height	H_n	m	-	-	-	-	-
	Heated gross floor area	$A_{H,g}$	m ²	-	-	-	-	-
	Heated net floor area	$A_{H,n}$	m ²	4731.87	3125.84	2544.20	4914.00	6599.01
	Heated gross volume	$V_{H,g}$	m ³	-	-	-	-	-
	Heated net volume	$V_{H,n}$	m ³	20201.51	13836.26	8221.82	19602.36	29032.66
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	399.94	249.25	233.23	380.50	506.00
	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	-	-	-	-	-
	Temperature of DHW	θ_w	°C	-	-	-	-	-
	DHW system power	$P_{W,gen}$	kW	-	-	-	-	-



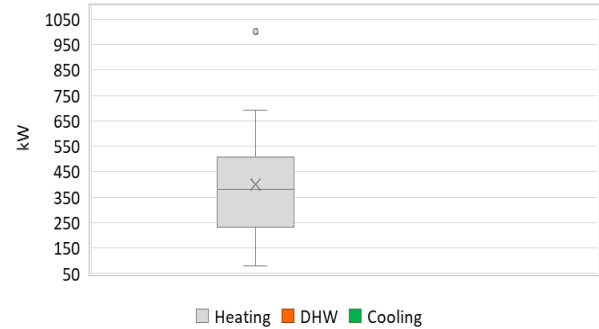
Region:	Apulia	Archetype code: EDUC_ 1961-1970_D-E_APU
Building category:	Residential buildings – Apartments (in multifamily blocks)	
Period of construction:	1961-1970	
Climatic zone:	D/E	
Number of records:		17

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

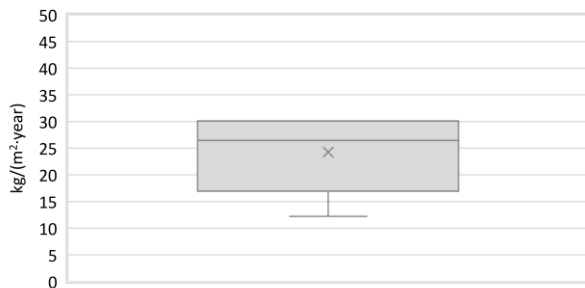
DHW SUPPLY TEMPERATURE



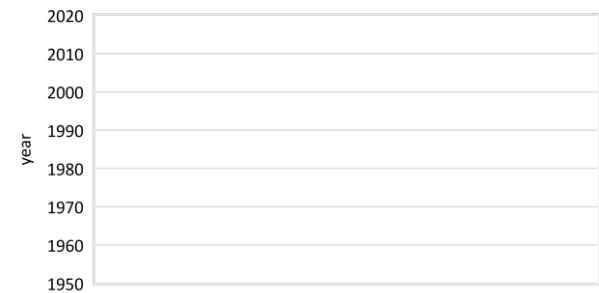
SYSTEM POWER



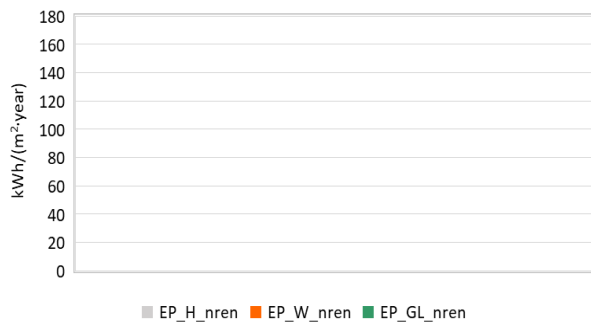
CO₂ EMISSION



HEATING SYSTEM INSTALLATION YEAR



NON-RENEWABLE PRIMARY ENERGY USE



RENEWABLE PRIMARY ENERGY USE

