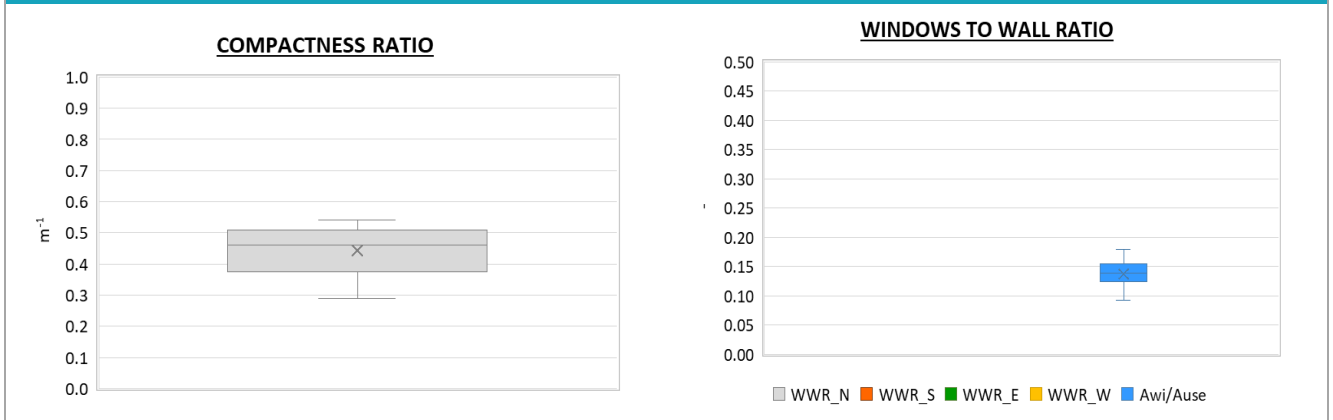
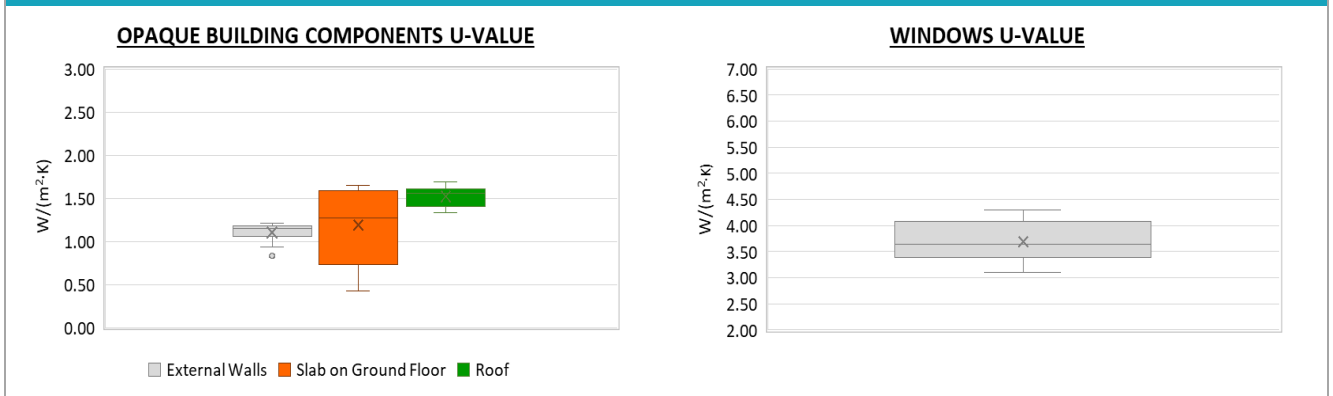
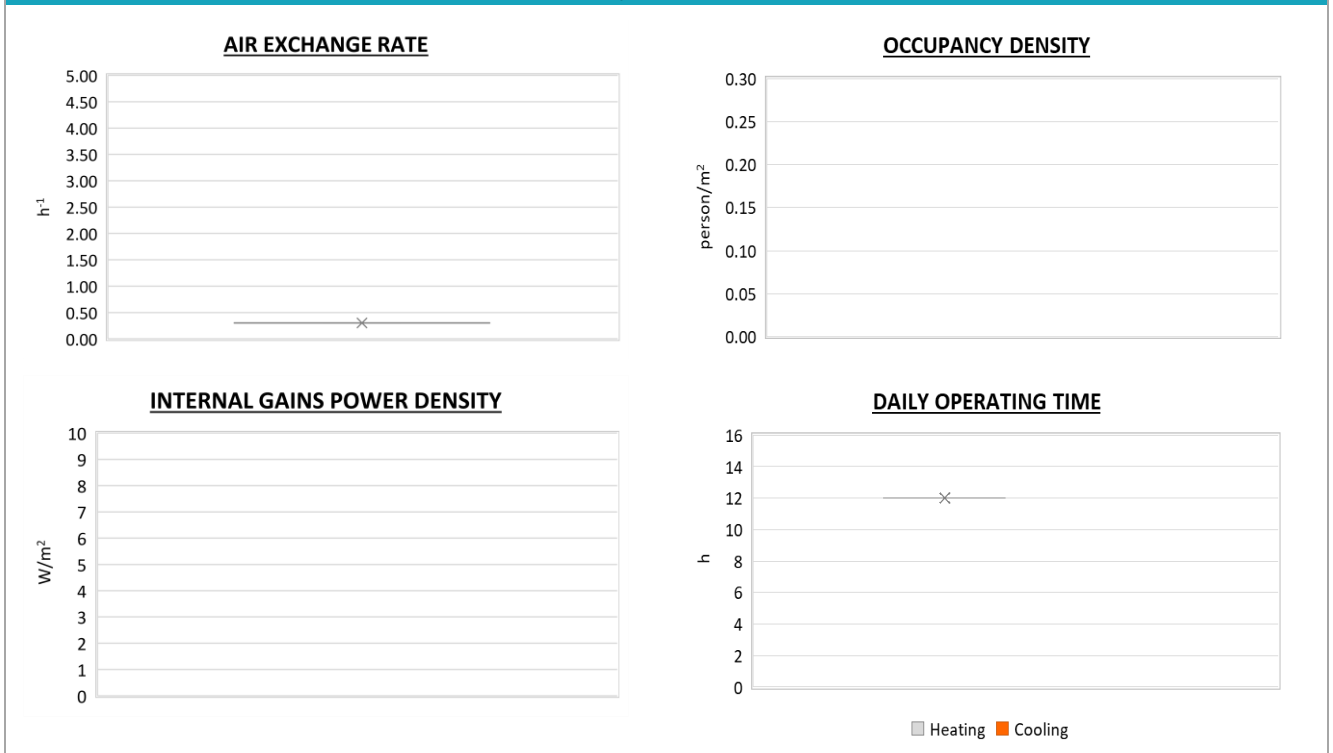


Region:	Lazio						Archetype code:		
Building category:	Residential buildings – Apartments (in multifamily blocks)						RES_APPBLOCK_1961-1975_D_LAZ		
Period of construction:	1961-1975								
Climatic zone:	D	Number of records:		13					
Description (the codes associated with walls and slabs refer to the structures described in UNI/TR 11552:2014):						Data sources:			
<u>External walls</u> : double layer of hollow bricks with uninsulated air gap (cod. MCV01).						Energy audits (100%)			
<u>Roof slabs</u> : reinforced brick-concrete slab plus uninsulated concrete screed (cod. SOL04)									
	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)	
BUILDING GEOMETRY	Number of floors	$n_f$	-	5.15	1.52	5	5	5	
	Gross height	$H_g$	m	21.19	5.67	19.18	19.98	25.92	
	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>	3040.43	1765.92	1786.45	2929.59	4288.26	
	Heated gross volume	$V_{H,g}$	m <sup>3</sup>	-	-	-	-	-	
	Heated net volume	$V_{H,n}$	m <sup>3</sup>	7556.96	5467.28	3502.86	6103.31	9794.12	
	Compactness ratio	$A_{\text{env}}/V_{H,g}$	m <sup>-1</sup>	0.44	0.08	0.39	0.46	0.51	
	WWR – North orientation	$WWR_N$	-	-	-	-	-	-	
	WWR – South orientation	$WWR_S$	-	-	-	-	-	-	
	WWR – East orientation	$WWR_E$	-	-	-	-	-	-	
	WWR – West orientation	$WWR_W$	-	-	-	-	-	-	
	Window to useful floor area ratio	$A_{wi}/A_{\text{use}}$	-	0.14	0.02	0.13	0.14	0.15	
ENVELOPE	Roof type	-							
	U-value of the roof	$U_{f,up}$	W/(m <sup>2</sup> ·K)	1.52	0.11	1.41	1.56	1.61	
	External walls type	Hollow brick masonry: 100%							
	U-value of the wall	$U_{wl}$	W/(m <sup>2</sup> ·K)	1.10	0.11	1.01	1.15	1.17	
	Slab on ground floor type	Brick-concrete slab: 100%							
	U-value of the floor	$U_{f,lf}$	W/(m <sup>2</sup> ·K)	1.19	0.44	0.81	1.27	1.55	
	Windows type	-							
	U-value of the windows	$U_w$	W/(m <sup>2</sup> ·K)	3.69	0.39	3.53	3.65	4.02	
Shading system type	-								
GAINS and VENTILATION	Occupancy density *	$O_c$	person/m <sup>2</sup>	UNI EN 16798-1 – Table A.19					
	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	-							
	Air exchange rate *	$n$	h <sup>-1</sup>	0.30	0.00	0.30	0.30	0.30	
THERMAL SYSTEMS	Heating system type	Centralized: 100%							
	Heating generator	Traditional boiler: 92%; Condensing boiler: 8%							
	Daily operating time of the heating system *	$t_H$	h	12.00	0.00	12.00	12.00	12.00	
	Energy carrier	Natural gas: 100%							
	Heating emission sub-system	Radiators: 100%							
	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: 100%							
	DHW generator	-							
	* These values were not available in the considered sources, and are thus derived from UNI EN Standards								

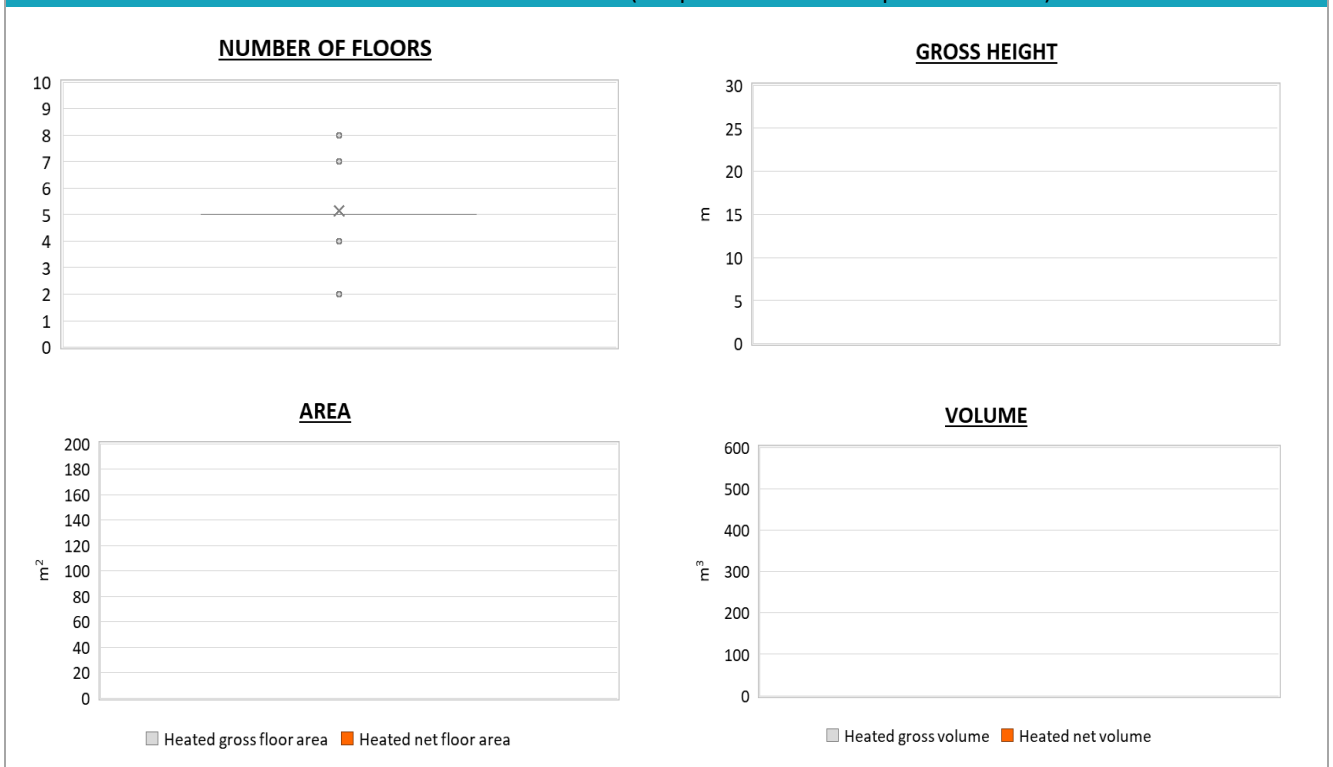
<b>Region:</b>	Lazio	<b>Archetype code:</b> RES_APPBLOCK_ 1961-1975_D_LAZ
<b>Building category:</b>	Residential buildings – Apartments (in multifamily blocks)	
<b>Period of construction:</b>	1961-1975	
<b>Climatic zone:</b>	D	

**Numerical variables – GEOMETRY**

**Numerical variables – ENVELOPE**

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


<b>Region:</b>	Lazio	<b>Archetype code:</b> RES_APPBLOCK_ 1961-1975_D_LAZ
<b>Building category:</b>	Residential buildings – Apartments (in multifamily blocks)	
<b>Period of construction:</b>	1961-1975	
<b>Climatic zone:</b>	D	

ADDITIONAL DATA								
	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)
<b>GEOMETRY:</b> apartments	Inter-storey height	$H_n$	m	-	-	-	-	-
	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>	-	-	-	-	-
<b>THERMAL SYSTEMS</b>	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	266.24	185.31	115.00	217.20	318.00
	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	$\theta_w$	°C	48.00	0.00	48.00	48.00	48.00
	DHW system power	$P_{W,gen}$	kW	40.72	70.10	41.19	67.55	98.87

\* These values refer to the apartment scale

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


<b>Region:</b>	Lazio	<b>Archetype code:</b> RES_APPBLOCK_ 1961-1975_D_LAZ
<b>Building category:</b>	Residential buildings – Apartments (in multifamily blocks)	
<b>Period of construction:</b>	1961-1975	
<b>Climatic zone:</b>	D	

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