

Region:		Trentino Alto Adige						Archetype code:			
Building category: Residential b		uildings – Aj	partments (in i	nultifamil	y blocks)		RES_APPBLOCK_				
Period of construction: 1951-1960 Climatic zone: E		1951-1960						1951-19	1951-1960_E_TN		
				Number	of records:	1868					
Descrip	tion (the codes ass	ociated with wal	s and slabs re	efer to the struct	ures descri	bed in UNI/TR	11552:2014):	Data s	ources:		
	<u>l walls:</u> no data av a <u>bs</u> : no data availa							APE (	(100%)		
	Data		Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)		
	Number of floo	rs	nf	-	-	-	-	-	-		
	Gross height		Hg	m	-	-	-	-	-		
	Footprint area		A <sub>footprint</sub>	m²	-	-	-	-	-		
~	Heated gross floor area		A <sub>H;g</sub>	m²	-	-	-	-	-		
TR	Heated net floor area		A <sub>H;n</sub>	m²	1090	1052	420	647	1334		
N.	Heated gross vo	olume	V <sub>H;g</sub>	m <sup>3</sup>	-	-	-	-	-		
9EO	Heated net volume		V <sub>H;n</sub>	m <sup>3</sup>	4268	3949	1692	3636	5069		
BUILDING GEOMETRY	Compactness ratio		A <sub>env</sub> /V <sub>H;g</sub>	m-1	0.51	0.14	0.42	0.49	0.57		
UIQ.	WWR – North o		WWR <sub>N</sub>	-	-	-	-	-	-		
١ <u>٦</u>	WWR – South orientation		WWRs	-	-	-	-	-	-		
	WWR – East orientation		WWRE	-	-	-	-	-	-		
	WWR – West or	rientation	WWRw	-	-	-	-	-	-		
	Window to user ratio	ful floor area	A <sub>wi</sub> /A <sub>use</sub>	-	-	-	-	-	-		
	Roof type					-					
	U-value of the roof		U <sub>fl;up</sub>	W/(m²·K)	-	-	-	-	-		
	External walls type					-	-	-			
DE	U-value of the wall		U <sub>wl</sub>	W/(m²⋅K)	-	-	-	-	-		
ENVELOPE	Slab on ground floor type					-					
EN	U-value of the floor		U <sub>fl;lw</sub>	W/(m²⋅K)	-	-	-	-	-		
	Windows type					-					
	U-value of the v	U-value of the windows		W/(m²⋅K)	-	-	-	-	-		
	Shading system	Shading system type				-					
z	Occupancy den	sity *	Oc	<i>O</i> <sub>C</sub> person/m <sup>2</sup> UNI EN 16798-1 - Table A.19							
and TION	Lighting power	Lighting power density *		W/m <sup>2</sup>	UNI EN 16798-1 - A.8.3						
GAINS an VENTILATI(	Equipment pow	ver density *	WL         W/m²         UNI EN 16798-1 - A.8.3           WA         W/m²         UNI EN 16798-1 - A.8.3								
	Type of ventilat	pe of ventilation				Natural:	100%				
~ >	Air exchange ra	te *	n	h-1	0.30	-	0.30	0.30	0.30		
	Heating system	type	Autonomous: 49%, Centralized: 30%, Unknown: 21%								
THERMAL SYSTEMS	Heating genera	tor	Boiler (unknown type): 80%, Condensing boiler: 9%, Traditional boiler: 6%, DHC: 4%Air source h pump: 1%								
	Daily operating heating system		t <sub>H</sub>	h	14	-	14	14	14		
	Energy carrier	ergy carrier		Natural gas: 97%, Gas Oil: 1%, DHC: 1%, LPG: 1%							
	Heating emission sub-system		-								
	Cooling system		Unknown: 98%Air-cooled chiller: 2%								
	Daily operating cooling system	*	tc	h	-	-	-	-	-		
	Cooling emissio	n sub-system	· · ·								
	DHW system ty	·	Autonomous – coupled with heating: 56%, Autonomous - detached from heating: 19%, Unknown: 14%, Centralized – coupled with heating: 10%, District heating: 1%								
	DHW generator	-							oiler: 3%		
	* These values were	re not available in the considered sources, and are thus derived from UNI EN Standards									



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. Residential buildings-Single family – 1951/1960 – Zone E – Trentino Alto Adige

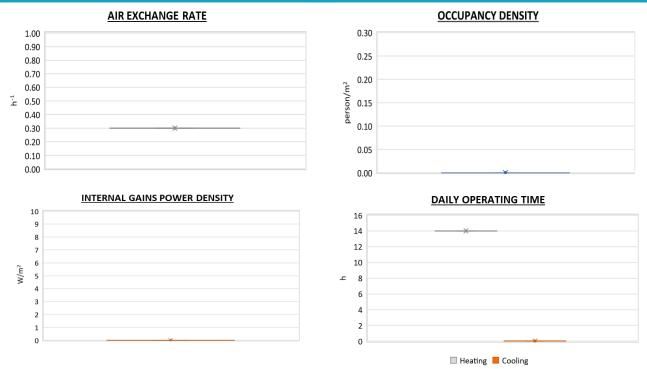


Region:	Trentino Alto Adige		Archetype code:			
Building category:	Residential buildings – A	Residential buildings – Apartments (in multifamily blocks)				
Period of construction	1951-1960					
Climatic zone:	E	Number of records:	1868			
	Num	erical variables – GEOMETRY	а <u> </u>			
			VINDOWS TO WALL RATIO			
	MPACTNESS RATIO	0.50	VINDOWS TO WALL RATIO			
1.2		0.45				
1.0	0	0.40				
		0.35				
0.8		0.30				
Ē 0.6		0.25				
	×	0.20				
0.4		0.15				
		0.10				
0.2		0.05				
0.0						
		WWR North	WWR South 📕 WWR East 📙 WWR West 📕 WNFA			
	Nun	nerical variables – ENVELOPE				
OPAQUE BU	ILDING COMPONENTS U-VAL	UE	WINDOWS U-VALUE			
3.00		7.00				
2.50		6.50				
2.50		6.00				
2.00		5.50				
ي بري المارما الممارما المماري المماريم الممارما الممارما الممارما الممارماما الممار الممار الممار الممار الممار الممارما الممارما الممارما الممارما الممارما الممارما الممارما الممارما الممارما الممارما الممارما ممارما ممارما ممارما ممارممامماممامماممامماممامماممامماممامما						
× 1.50		ية 5.00 ق 4.50				
1.00		⊊ 5.00 E 4.50 ≥ 4.00				
0.50		3.50				

3.00 2.50 2.00

0.00 🔲 External Walls 📕 Slab on Ground Floor 📕 Roof

## Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE



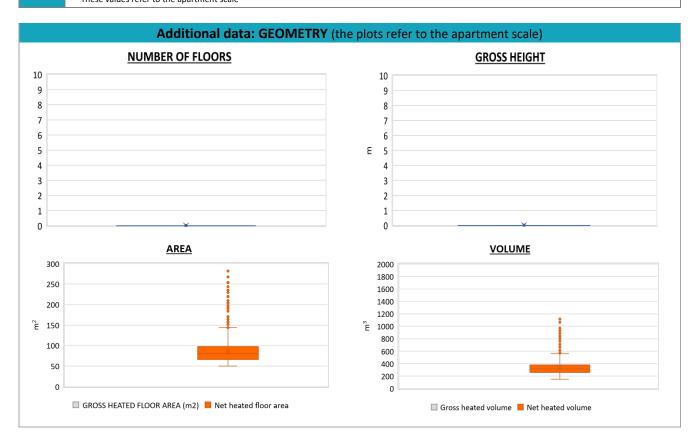


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Building category:	Residential buildings – A	RES_APPBLOCK_		
Period of construction:	1951-1960	1951-1960_E_TN		
Climatic zone:	E	Number of records:	1868	

			ADDITIONA	L DATA				
	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)
GEOMETRY: apartments	Inter-storey height	H <sub>n</sub>	m	-	-	-	-	-
	Heated gross floor area	A <sub>H;g</sub>	m <sup>2</sup>	-	-	-	-	-
	Heated net floor area	A <sub>H;n</sub>	m <sup>2</sup>	86	29	66	80	97
	Heated gross volume	V <sub>H;g</sub>	m <sup>3</sup>	-	-	-	-	-
	Heated net volume	V <sub>H;n</sub>	m <sup>3</sup>	334	114	258	312	382
THERMAL SYSTEMS	Heating efficiency or COP	$\eta_{ m H;gen}$ or $COP_{ m H;gen}$	-	This value has to be retrieved from suitable datasheets				
	Total heating power *	P <sub>H;gen</sub>	kW	59	119	24	26	31
	Cooling efficiency or EER	η <sub>C;gen</sub> or EER <sub>C;gen</sub>	-	This value has to be retrieved from suitable datasheets				
	Total cooling power *	P <sub>C;gen</sub>	kW	43	218	3	5	7
	Temperature of DHW	ϑw	°C	40	-	40	40	40
	DHW system power *	P <sub>W;gen</sub>	kW	48	108	20	24	29
	* These values refer to the apartment scale							



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