

Region: Trentino Alto Adige Archetype code: **Building category:** Office buildings OFF\_2011-\_E\_TN **Period of construction:** >2011 Climatic zone: **Number of records:** 

Description (the codes associated with walls and slabs refer to the structures described in UNI/TR 11552:2014):

External walls: no data available Roof slabs: no data available

Ε

Data sources: APE (100%)

	Data	Symbol	Unit of	Mean	Standard	Q1 (first	Median	Q3 (third			
		• • • • • • • • • • • • • • • • • • • •	measure	value	deviation	quartile)	value	quartile)			
BUILDING GEOMETRY	Number of floors	n <sub>f</sub>	-	-	-	-	-	-			
	Gross height	Hg	m	-	-	-	-	-			
	Footprint area	A <sub>footprint</sub>	m²	-	-	-	-	-			
	Heated gross floor area	A <sub>H;g</sub>	m²	-	-	-	-	-			
	Heated net floor area	A <sub>H;n</sub>	m²	474	675	100	194	521			
	Heated gross volume	V <sub>H;g</sub>	m³	-	-	-	-	-			
	Heated net volume	V <sub>H;n</sub>	m³	2273	3407	385	981	2503			
	Compactness ratio	A <sub>env</sub> /V <sub>H;g</sub>	m <sup>-1</sup>	0.58	0.18	0.46	0.55	0.69			
	WWR – North orientation	WWR <sub>N</sub>	-	-	-	-	-	-			
5	WWR – South orientation	WWR <sub>S</sub>	-	-	-	-	-	-			
_ α	WWR – East orientation	WWR <sub>E</sub>	-	-	-	-	-	-			
	WWR – West orientation	WWR <sub>W</sub>	-	-	-	-	-	-			
	Window to useful floor area ratio	A <sub>wi</sub> /A <sub>use</sub>	-	-	-	-	-	-			
	Roof type				-						
	<i>U</i> -value of the roof	U <sub>fl;up</sub>	W/(m²⋅K)	-	-	-	-	-			
	External walls type				-						
PE	<i>U</i> -value of the wall	U <sub>wl</sub>	W/(m²·K)	-	-	-	-	-			
ENVELOPE	Slab on ground floor type				-						
	<i>U</i> -value of the floor	U <sub>fl;lw</sub>	W/(m²·K)	-	-	-	-	-			
	Windows type				-						
	<i>U</i> -value of the windows	U <sub>W</sub>	W/(m²·K)	-	-	-	-	-			
	Shading system type			-							
z	Occupancy density *	O <sub>C</sub>	person/m²	UNI EN 16798-1 - Table A.19							
GAINS and VENTILATION	Lighting power density *	W∟	W/m²	UNI EN 16798-1 - A.8.3							
NS ILA	Equipment power density *	W <sub>A</sub>	W/m <sup>2</sup>	UNI EN 16798-1 - A.8.3							
GAI	Type of ventilation			Natural: 100%							
~ >	Air exchange rate *	n	h <sup>-1</sup>	UNI EN 16798-1							
	Heating system type	Unknown: 88%, Autonomous: 7%, Centralized: 5%									
S	Heating generator	Traditional boiler: 37%, Condensing boiler: 33%, Air source heat pump: 12%, Boiler (Unknown type): 9%, DHC: 5%, Unknown: 3%, Water-source heat pump: 1%									
	Daily operating time of the heating system *	t <sub>H</sub>	h	14	-	14	14	14			
EMS	Energy carrier	Natural gas: 81%, Electricity: 12%, District heating: 4%, Gas Oil: 1%, Solid biomass: 1%									
THERMAL SYSTE	Heating emission sub-system	-									
	Cooling system type	Unknown: 67%, Air-cooled chiller: 31%, Water-cooled chiller: 2%									
	Daily operating time of the cooling system *	t <sub>C</sub>	h	-	-	-	-	-			
	Cooling emission sub-system				-						
	DHW system type	Autonomous - detached from heating: 35%, Unknown: 35%, Autonomous – coupled with heating: 25%, District heating: 3%, Centralized – coupled with heating: 2%									
	DHW generator	Ur	nknown: 37%, Na	atural gas b	oiler: 28%, Ele	ctric boiler: 27%	6, Electric heat ρι	mp: 8%			
	* These values were not available in the considered sources, and are thus derived from UNI EN Standards										



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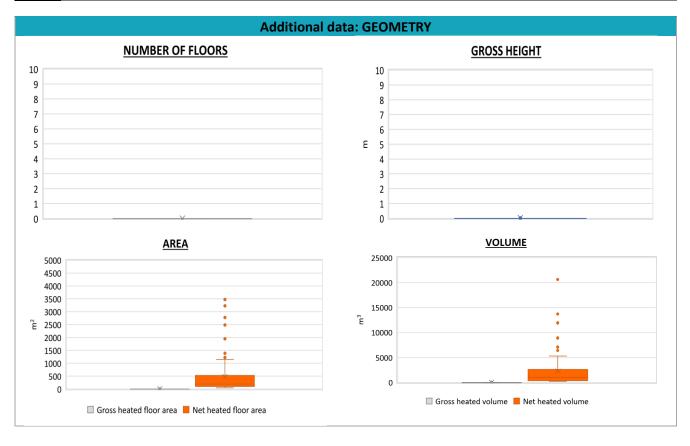
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ADDITIONAL DATA												
THERMALSYSTEMS	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)				
	Heating efficiency or COP	$\eta_{\sf H;gen}$ or $ extit{COP}_{\sf H;gen}$	-	This value has to be retrieved from suitable datasheets								
	Total heating power	$P_{H;gen}$	kW	78	268	3	31	55				
	Cooling efficiency or EER	η <sub>C;gen</sub> or <i>EER</i> <sub>C;gen</sub>	-	This value has to be retrieved from suitable datasheets								
	Total cooling power	$P_{C;gen}$	kW	115	153	20	61	116				
	Temperature of DHW	$artheta_{\sf W}$	°C	40	-	40	40	40				
	DHW system power	$P_{ m W;gen}$	kW	-	-	-	-	-				





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