

**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: no data available

Data sources: Survey data (52%) Measured data (16%) Expert assumptions (12%) Others (20%) #

							Others (20%) #				
	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)			
BUILDING GEOMETRY	Number of floors	n <sub>f</sub>	-	1.62	1.16	1.00	1.00	2.00			
	Gross height	H <sub>g</sub>	m	1.02	1.10	1.00	-	2.00			
	Footprint area	A <sub>footprint</sub>	m <sup>2</sup>	_	_	-	-	_			
	Heated gross floor area	i	m <sup>2</sup>	_	-	-	-	-			
	Heated net floor area	A <sub>H;g</sub>	m <sup>2</sup>	_				-			
		A <sub>H;n</sub>	m <sup>3</sup>	-	-	-	-	-			
	Heated gross volume	V <sub>H;g</sub>	m <sup>3</sup>	-	-	-	-	-			
	Heated net volume	V <sub>H;n</sub>	m <sup>-1</sup>	0.20	- 0.15	- 0.25	- 0.22	- 0.20			
	Compactness ratio	A <sub>env</sub> /V <sub>H;g</sub>		0.36	0.15	0.25	0.33	0.39			
	WWR – North orientation	WWR <sub>N</sub>	-	0.21	0.15	0.12	0.19	0.27			
<b>B</b>	WWR – South orientation	WWR <sub>S</sub>	-	0.21	0.18	0.09	0.13	0.25			
	WWR – East orientation	WWR <sub>E</sub>	-	0.19	0.13	0.09	0.18	0.22			
	WWR – West orientation	WWR <sub>W</sub>	-	0.26	0.14	0.15	0.24	0.37			
	Window to useful floor area ratio	A <sub>wi</sub> /A <sub>use</sub>	-	0.15	0.05	0.10	0.14	0.18			
	Roof type				-						
	<i>U</i> -value of the roof	$U_{fl;up}$	W/(m²·K)	1.01	0.62	0.46	0.79	1.58			
	External walls type	Hollow brick masonry: 81%, Solid brick masonry: 14%, Masonry with local stones: 5%									
ш	<i>U</i> -value of the wall	$U_{ m wl}$	W/(m <sup>2</sup> ·K)	1.08	0.48	0.80	1.02	1.11			
Q.	Slab on ground floor type				-						
ENVELOPE	<i>U</i> -value of the floor	U <sub>fl;lw</sub>	W/(m <sup>2</sup> ·K)	0.87	0.61	0.32	0.72	1.31			
	Windows type	Single glazing, wooden frame: 43%, Double glazing, aluminum frame with thermal break: 24%, Single glazing, aluminum frame: 19%, Double glazing, aluminum frame, no thermal break: 9%, Double glazing, wooden frame: 5%									
	<i>U</i> -value of the windows	U <sub>W</sub>	W/(m <sup>2</sup> ·K)	3.23	0.84	2.80	3.00	3.45			
	Shading system type	Shutter: 52%, Roller blinds: 43%, Curtains: 5%									
GAINS and	Occupancy density	O <sub>C</sub>	person/m <sup>2</sup>	0.031	0.011	0.023	0.030	0.038			
	Lighting power density *	W <sub>L</sub>	W/m <sup>2</sup>			UNI EN 16798	-1 - A.8.3				
S S	Equipment power density *	W <sub>A</sub>	W/m²	,							
GAINS and ENTILATION	Type of ventilation	Natural: 100%									
0 8	Air exchange rate *	n	h <sup>-1</sup>	0.30	0.00	0.30	0.30	0.30			
	Heating system type		Autonomous: 95%, Centralized: 5%								
THERMAL SYSTEMS	Heating generator	Traditional Boiler: 76%, Condensing Boiler: 10%, Air-source heat pump: 5%, Unknown: 9%									
	Daily operating time of the heating system	t <sub>H</sub>	h	8.00	0.00	8.00	8.00	8.00			
	Energy carrier	Natural Gas: 71%, LPG: 10%, Electricity: 10%, Unknown: 9%									
	Heating emission sub-system	Radiators: 81%, Fan coil: 10%, Unknown: 9%									
	Cooling system type	Absent: 95%, Air-cooled chiller: 5%,									
	Daily operating time of the										
	cooling system *	<b>t</b> c	h	8.00	0.00	8.00	8.00	8.00			
	Cooling emission sub-system	Fan coil: 100%									
	DHW system type	-									
	DHW generator				-						
	# Standards (8%), Municipal database (8%), EPC database (4%).										
	* These values were 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.

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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 <sub>n</sub>	m	2.85	0.19	2.70	3.00	3.00			
	Heated gross floor area	A <sub>H;g</sub>	m <sup>2</sup>	152.09	47.61	108.50	141.95	192.64			
	Heated net floor area	A <sub>H;n</sub>	m²	127.85	40.65	92.50	116.30	162.91			
	Heated gross volume	V <sub>H;g</sub>	m³	474.84	156.67	334.20	422.41	600.93			
	Heated net volume	V <sub>H;n</sub>	m³	364.43	122.26	254.31	322.22	460.28			
THERMAL SYSTEMS	Heating efficiency or COP	η <sub>H;gen</sub> or <i>COP</i> H;gen	-	This value has to be retrieved from suitable datasheets							
	Total heating power *	P <sub>H;gen</sub>	kW	27.04	6.53	24.00	24.00	26.95			
	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 <sub>C;gen</sub>	kW	-	-	-	-	-			
	Temperature of DHW	$\theta_{W}$	°C	40.00	0.00	40.00	40.00	40.00			
Ė	DHW system power	P <sub>W;gen</sub>	kW	-	-	-	-	-			
	* These values refer to the apartment scale										





