

Comparison of requirements

Applies to a multi-family house (new construction) with the following assumptions: Roof area 100m², apartment size 125m², proportion of unheated area 20%.

	Topic	Standard Minergie Switzerland 2023	Standard Minergie Switzerland 2017	Minergie Latam 2024 standard (List contains only the mandatory requirements)
Energy operation and greenhouse gas emissions Creation	Weighted total energy (Minergie coefficient MKZ)	≤ 51 kWh/m ² ERA/a (varies depending on roof, apartment size and location)	≤ 55 kWh/m ² ERA/a	No requirement
	Building envelope (heat demand)	≤ 90% of the limit value $Q_{h,li}$ for new buildings according to MuKE n 2014	≤ 100% of the limit value $Q_{h,li}$ for new buildings according to MuKE n 2014	U-values must be complied with (depending on climate zone and building component). Example of U-values in the cool ASHRAE climate zone 5: Roof and exterior walls 0.25 W/m ² /K, windows and exterior doors: 1.9 W/m ² /K. Thermal bridges (only ASHRAE climate zones ≥ 4): Linear thermal bridges: ψ -value ≤ 0.5 W/m ² /K, punctual thermal bridges: χ -value ≤ 0.5 W/K
	Heating and hot water	Fossil-free	Fossil-free	Fossil-free, gas is only permitted for cooking (but must be compensated for with higher in-house electricity production)
	Energy heating, DHW, ventilation, air conditioning	No requirement	≤ 35 kWh/m ² ERA/a	No requirement
	Lighting	Included in MKZ Efficiency measures	Included in MKZ Efficiency measures	LED only
	Devices	Included in MKZ Efficiency measures	Included in MKZ Efficiency measures	Appliances must have one of the best energy efficiency labels available on the national market.
	Own power generation	MKZ has a full roof	At least 10 Wp per m ² ERA no more than 30 kWp	At least 10 Wp per m ² ERA no more than 30 kWp and no more than 50% of the roof area
	Cooling	To be included in MKZ	To be included in MKZ	Cooling systems: SEER value of at least 7 [kW/kW]
	Airtightness	No requirement	Concept	Detailed sketches must be submitted for the most important and most common structural connections in the building envelope (e.g. wall to roof, fixing of windows to walls, base of the building, etc.).

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	Electromobility	Power supply to the charging station for at least 60% of the parking spaces	Empty pipes to the parking space	No requirement
	Monitoring	From 1000m ² ERA Measurement of the relevant energy flows	From 2000m ² ERA Measurement of the relevant energy flows	Annual recording of electricity and water consumption
	Greenhouse gas emissions of the Construction	Limit value 11 kgCO _{2eq} /m ² /a (varies by project, without surcharges for PV/earth probe)	No limit value, but the value must be calculated	No limit value, but the value must be calculated
Comfort and health	Indoor air	Continuous Ventilation	Continuous Ventilation	Continuous Ventilation from 1500 HDD or 3500 CDD (incl. heat recovery from 2500 HDD / 3500 CDD)
	Solar heat protection	Maximum 100h/a overheating, calculated with weather data for the period 2020-2049	Maximum 100h/a overheating, calculated with standard weather data (SIA 2028)	90 % of all transparent surfaces are protected from direct sunlight if the outside temperature is > 28°C. (only applies to warm and hot climate zones, i.e. ASHRAE climate zone ≤ 3)
	Health	No requirement	No requirement	The following applies to interior spaces: <ul style="list-style-type: none"> – No lead colors – No wood that has been treated with CCA (copper, chromium and arsenic) or SBX (boron oxide) – No paints/varnishes with > 25% solvents or VOCs – No wood-based materials with a high formaldehyde content – No materials that release respirable mineral fibers
Ecology	Water	No requirement	No requirement	Efficient sanitary fixtures: <ul style="list-style-type: none"> – Toilet: max. 5 l/flush + small quantity button – Faucet: max. 6l/minute – Shower/tub: max. 8l/minute
	Outdoor space	No requirement	No requirement	<ul style="list-style-type: none"> – 35% of the outdoor space must have vegetation – 5% must be occupied by hedges, rows or groups of trees