

Stove passive houses too!

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Did you know that in Austria are built for low-energy and passive houses is a significant part of stove?

Engineers have kályhasként outset interested in the new book yet untrodden paths. Huge change when I started in this business as its main objective was to analyze a design and construction methods, thanks to the stove Things that can go beyond the present and future expectations.

After the compulsory apprenticeship and skilled Hungary got, I bought the direction abroad. [stove culture of several countries by learning](#) I realized that the world's highest levels of one another are very similar, Austria, Switzerland, southern Germany and northern Italy - primarily consists of the Alpine region . Nothing shows this better than the stove in that area is probably the most respected profession, and [to this day the ever-popular tile stove](#) . The Alps is difficult to imagine a new house without plaster or tile stove, whether passive or active, or along any other modern design philosophy envisioned. Due to the continuous development of the manufacturers and trade associations in the tile stove built there the same sophisticated systems than any other modern counterparts.

Let us see what are the **design, construction technology and design elements** , which are the most modern houses with tiled stove, and a forward-looking customer expectations Adjuster:

- Ensure the proper operation of the stove starts with planning. The energy balance of modern houses sensitive alignment is essential for [careful performance scaling](#). correct operation and higher efficiency while ensuring accurate thermal and aerodynamic sizing required. Moreover, these various laws and standards require (BS EN 15544 and no. IEC 13384 series). As with all design work, the design and planning of stoves can be a complicated task, in practice, [impossible without software support](#) . The first dimension of the Austrian Association of Tiled stoves rely on sizing program, which is the most widely used and versatile of these devices. They not only on the stove, but the total combustion air supply stove chimney system certificates of two standards can be optimized, and the list can be printed in the official proceedings. every architectural and engineering elements of a low-energy house in-depth planning, require fine-tuning. Why should it be different for stoves? In the last period, when without any prior preparation, the stove on the site, find out when the building was the next step. As built based on the one-size-fits, designs stoves age is over. I have all my work is a planner before the first fire-clay brick or tile laying and prepare. This individual cases can take up more time than the building itself.

№	Qm [m³/h]	Qv [m³/h]	DK [mm]	Δp [Pa]	N [mm]	N [mm]	TP [°C]	V [m³/h]	v [m/s]	W [Pa]	M	W [Pa]	ΔPE [Pa]	C	W [Pa]
Flow 1	0.25	0.25	80	0.0546	27.8	26.0	212	0.081	1.21	0.00	0.0012	0.02	0.43	1.26	0.54
Flow 2	0.63	0.63	80	0.0558	27.8	26.0	212	0.081	1.23	0.00	0.0012	0.02	0.43	1.26	0.54
Flow 3	0.97	0.97	80	0.0460	24.8	20.8	247	0.058	1.22	0.00	0.0012	0.04	0.48	1.20	0.53
Flow 4	0.63	0.63	80	0.0460	20.8	22.0	218	0.058	1.20	-0.52	0.0012	0.06	0.41	1.20	0.61
Flow 10	0.97	0.97	80	0.0460	20.8	22.0	198	0.058	1.20	0.00	0.0012	0.02	0.51	1.20	0.63
Flow 11	0.63	0.63	80	0.0460	20.8	20.8	171	0.058	1.25	4.84	0.0012	0.11	0.61	1.20	0.73
Flow 12	0.25	0.25	80	0.0460	16.8	16.8	189	0.047	1.05	0.00	0.0012	0.15	1.46	1.24	1.00
Flow 13	0.25	0.25	80	0.0001	16.8	16.8	189	0.047	1.09	0.04	0.0012	0.14	2.43	1.20	2.84

- Use of appropriate building technologies with tiled stove life of either the owner or the life of the house can be longer [unknown in Austria, the tile stove transmitt](#)

- Use of appropriate building technologies with tiled stove fire or either the owner or the life of the house can be longer. **unknown in Austria, the tile stove transmission**, alpine areas of the stoves built 100 year lifetime. I myself have not seen a similar age stove, performing daily use, which require only a few per year (as with any other heating system) maintenance, but not a complete rebuilding.

whom lack a systematic construction of the center of the house? Fortunately, you can forget the annual refueling 10-20 west of the applied technology and engineering in addition to proper operation.

- Today and in the future based on strictly the **airtight houses** the boilers - so **the stove - the supply of combustion air is the only house outside air duct can be solved**. Fortunately, modern furnace-building technologies and design standards and programs mentioned above allow for this tiled stove. West of us rarely encounter a new building with a tiled stove, which the operation can not be completely independent of the residential air square. I act on accordingly.

- Fewer our free time we want less of firewood for the stove and filled foglalatokodással. Legitimate claim to the stove more frequently claim ignition (preferably only once a day), and between the two ignition power as balanced as possible futsal. This stove - from the existing national practices - heavy construction method of the higher thermal mass by incorporating may be provided. **western Austria and Switzerland have traditionally either 12-20 cm thickness and several tonnes of thermal storage mass build the tiled stove**. way I assure the stove up to 24 hours through even heat.

- There is a growing demand for environmental technologies. Surely everyone is known for a fact that wood firing 100% renewable energy driven heating mode - if it does not require any other external power source. Between the wood stove is definitely the firing modes such. It also nowadays favored heat pump, but can even the most solar system either.

was among the wood firing modes on the stove utilizes the stored wood, solar power is one of the highest efficiency. **A cserépkályhánál minimum efficiency required by law, 78%**, but a well-insulated chimney can be built up (for the whole heating season equivalent) at 85-90% efficiency stove.

between the solid fuel heaters tile stove extremely low exhaust emissions. Jointly developed by the Austrian Tile Stove Association Research and Development Laboratory and the Vienna University of firing department, **fire Terre UZ37 constructed and properly sized tile stove, the 2015** most stringent exhaust emissions limits galore to fulfill existing and across Europe in Austria. Therefore, the combustion chamber is uniquely UmweltPlus certified company, we only get it certified as low ökolábnyomú products. This furnace or fittings that are manufactured by several manufacturers, even at lower ökolábnyommal, hand-built primary building materials as well. In Hungary, this fire depart the installation of the first pushing it further I built the stoves efficiency and reduce the eco-footprint.



- Thanks to modern building materials and construction technologies, traditionally known in other countries, we have built stoves adornments can be traditional or modern home as well. The Austrian air-gap construction technology **of the heater can be of any shape, regardless of the internal system**. regardless of the area also has no borders: contemporary design, tile stoves, fireplaces numerous types of plaster, clay plaster, plastered and painted the exterior surface can be.



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- Decorate with hand-painted mural or ceramic relief. The view of the fire through a myriad of style, glazed or even entirely made of glass firebox door enjoyable. Whether you're in the middle of the room can accommodate low but stove as a room divider can also function as a heated backrest can provide seating next to the dining table.



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- The tile stove healthy, minimal air movement generating radiant heat source. Because **it emits infrared rays are not directly in the air** is heated, but the furnishing, interior wall surfaces, and the people staying in the same room with him, feeling the heat it provides very nice. Austria Passive houses are often built as extreme cold can compensate for the ventilation system built on air-to-air heat pump efficiency is decreasing, and the outside cold to incoming residents can hide in a frozen solid surface to warm. In the case of passive houses typical air heating in the apartment would not be so melegedőhely. stove in countries with high levels of culture have so commercialized that the house will not be home until the stove does not migrate into the family of the fire.



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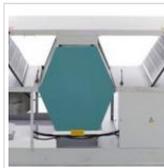
The theory and practice my skills acquired at home and abroad trying to restore service to domestic customers, beautiful and modern building stoves. I hope that the article is not only to prospective builders, but the progressive-minded architects also draws attention to **the tile stove not only the past but the future is out of place!** (x)

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