

Napomene o ventilaciji stana / Notes on home ventilation

Napomene o ventilaciji stana

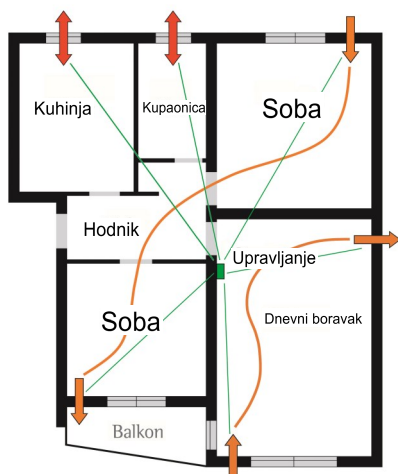
Kako bismo se u vlastita četiri zida osjećali ugodnije, stan je opremljen ventilacijskim sustavom koji brine za kontinuiranu izmjenu zraka. Tako uvijek imamo svjež i čist zrak. Uz to se štedi energija za grijanje i zgrada se štiti od oštećenja vlagom i plijesni.

Odakle dolaze štetne tvari i vlaga?

Namještaj, tepisi i boje ispuštaju štetne tvari u manjim količinama. No prije svega otpadni zrak stanara, tuširanje, pranje i sušenje rublja, kuhanje te biljke stvaraju vlagu. U kućanstvu s 4 osobe dnevno ispari otprilike 10 litara vode.



Kamo s vlažnim, onečišćenim zrakom u prostoriji?



Zrak može primiti samo ograničenu količinu vlage. Ta količina ovisi o temperaturi: topao zrak prima više vlage nego hladan. Kada se topao, vlažan zrak ohladi, npr. na hladnoj površini, dolazi do kondenzacije: nastaje „kondenzat“. To vidite svakog ljeta na svojoj hladnoj čaši pića.

Opasnost od stvaranja plijesni: Na hladnijim mjestima vanjskog zida, npr. u kutovima, može se istaložiti vlaga iz zraka u obliku kondenzata – idealno okruženje za plijesan.

Zaštita od oštećenja vlagom: Vлага sadržana u zraku prostorije može se smanjiti samo učinkovitom ventilacijom. Vlagom se istovremeno odvođe i štetne tvari iz zraka prostorije.

Nekada se izmjena zraka odvijala kroz brojne fuge u ovojnici zgrade, npr. na prozoru. Tako je vlažan i onečišćen zrak prostorije mogao izlaziti. Pritom se svaki sat u stanu izmjenjivalo do 5 puta zrak. Kondenzat ili kondenzirana voda tada su se stvarali samo na hladnim prozorskim staklima, bez daljnjih posljedica.

Danas za sanirane i nove stambene zgrade vrijedi Uredba o uštedi energije (EnEV). Zgrade moraju biti gotovo nepropusne. Time otpada ventilacija kroz fuge i stanovi se moraju aktivno ventilirati. Zbog visokih troškova energije ventilira se, međutim, premalo. Dolazi do oštećenja vlagom, čime trpe zdravlje stanara i sama građevina.

Dosad se ventilacija odvijala samo odsisom zraka iz prostorija bez prozora. Unutarnje kupaonice pri korištenju ventilirale su se u kombinaciji s vremenskim naknadnim radom. Dostrujavanje vanjskog zraka odvijalo se kroz netesnosti zgrade. U ostatku stana ventilacija je također bila osigurana propusnošću zraka ovojnice zgrade.

Danas ventilacijski uređaji u kupaonici, WC-u ili i u kuhinji za odsis cijelog stana trajno rade na niskom stupnju. Prema potrebi može se postaviti viši stupanj ili se može aktivirati regulacija vlage koja to preuzima automatski. Dostrujavanje vanjskog zraka sada se mora odvijati putem vanjskih zidnih prolaza za zrak (ALD). Zahvaljujući integriranoj zaštiti od tlaka vjetra i prigušivaču zvuka, u stambenom prostoru ostaje bez propuha i tiho.



Vaš LUNOS tim

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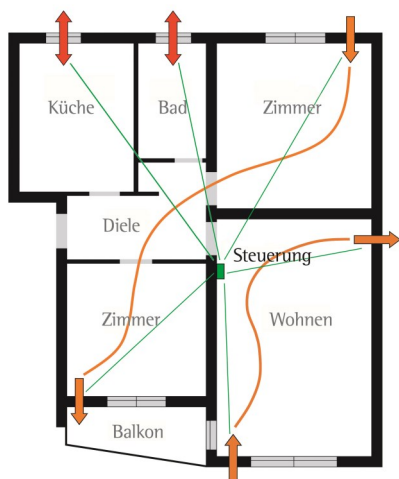
To make you feel more comfortable within your own four walls, the home is equipped with a ventilation system that ensures a continuous exchange of air. This means you always have fresh, clean air. It also saves heating energy and protects the building from moisture damage and mould.

Where do pollutants & moisture come from?

Furniture, carpets and paints evaporate pollutants in minute quantities. Moisture is produced by the breathing air of the residents, showering, washing and drying clothes, cooking and also by the plants. In a household of 4 people, about 10 litres of water evaporate per day.



Where to put the humid, polluted indoor air?



Air can only absorb a limited amount of moisture. The amount depends on the temperature: warm air absorbs more than cold air. If the warm, moist air cools down, e.g. on a cold surface, condensation occurs: condensation water develops. You can see this every summer on your cool drink glass.

Danger of mould growth: At the cooler places of the outer wall, e.g. in corners, the humidity can precipitate as condensate, an ideal environment for moulds.

Protection against moisture damage through ventilation: The moisture contained in the room air can only be reduced through effective ventilation. With the humidity also the pollutants in the room air are removed at the same time.

In the past, air exchange used to take place through numerous joints in the building envelope, e.g. at the window. Thus the humid and loaded room air could escape air. Here often a five-fold air exchange per hour adjusted it-

self in the apartment. Condensation only formed on the cold window panes, without any further consequences.

Today, the Energy Saving Ordinance (EnEV) applies to renovated and new residential buildings. The buildings must be almost airtight. This means that there is no need for joint ventilation and the user must actively ventilate the building. Due to the high energy costs, however, too little ventilation is being used. Moisture damage occurs, which affects the health of the occupants and the substance of the house.

Up to now, ventilation has only been used to ventilate rooms without windows. Interior bathrooms were ventilated when used in connection with a time lag. A post-flow of the outside air took place via the building leaks. In the rest of the apartment, ventilation was also ensured by the air flow through the building cover.



Today, ventilation devices in the bathroom, toilet or kitchen are permanently in a weak state to ventilate the entire apartment. If necessary, a higher level can be set or humidity control can automatically take over. The fresh air must now flow through outside wall diffusers (ALD). Due to the integrated wind pressure protection and the silencer, it remains silent and draught-free in the living area.

Your LUNOS team