

General guidelines

To reduce the energy used by ventilation and at the same time ensure good indoor air quality you need to...

- **...keep the floors clean** with plain water, if possible;
- **...put a large floor mat at every door to keep out** dirt and other pollutants;
- **...separate significant emission sources**, such as large copy machines, from occupied spaces;
- **...use natural, non-toxic** detergents, cleaning agents, air fresheners;
- **...keep a healthy level of humidity** of around 40%-60% to keep dust and mould under control;
- **...use natural ventilation**, let in fresh air;
- **...change the filters** so the ventilation system can work properly;
- **...make the office green with plans.** 😊

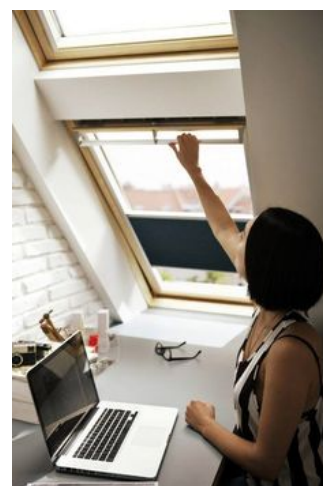
VENTILATION AND INDOOR AIR QUALITY

Good ventilation and good indoor air quality (IAQ) are essential, you need fresh air and protection against damp and condensation in the office building.

As unnecessary ventilation can waste energy and cost you a lot of money, you have to try to achieve a balance between good air quality/comfortable indoor environment and rational energy use. If you do your best to keep the air clean inside, you will have to rely less on ventilation and you can reduce your carbon footprint and costs significantly.

Steps to Improve Indoor Air Quality

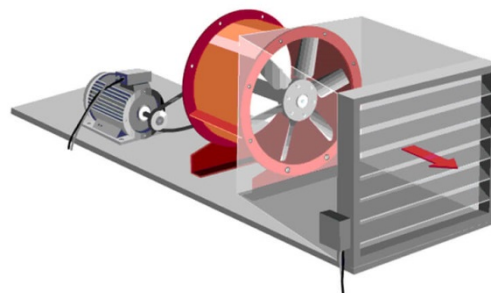
- **Keep the floors clean** – vacuum and mop up the dust and dirt, get rid of chemicals and allergens. Don't forget walls, carpet edges, and upholstered furniture. You can do the mopping with plain water, no cleaning agents required.
- **Put a large floor mat at every door.** It reduces the amount of dirt, and other pollutants from getting into the office.
- **Significant emission sources**, such as large copy machines, **should be separated from occupied spaces** and air intakes.
- Do not use any detergents, cleaning agents, air fresheners with synthetic fragrances – **look for natural, non-toxic, eco-labelled products.** Stop using aerosol sprays.
- **Forbid smoking in the office**, if it is not yet forbidden by law.
- **Keep a healthy level of humidity** of around 40%-60% to keep dust mites and mould under control.
- **Use natural ventilation**, let in fresh air. If your colleagues suffer from pollen allergies, keep the rooms ventilated with a filtered air- conditioning system.
- **Change the filters** - The dirtier a filter is, the harder it is for the ventilation system to work properly – it wastes energy, increases your utility bills and it can also lead to serious health issues.
- **Make the office green with plans** – they purify the air and can also cheer you up ☺
- **Regularly maintain** your HVAC and other building systems.



TOP TIPS FOR CHAMPIONS

Ventilation maintenance

1. Motors - When you have to buy new motors for your ventilation system, always look for ones with higher efficiency so you can save energy and lower your bills.



2. Fans – Use fans with variable speed. They slow down – and save energy - when demand for ventilation decreases.

YOU CAN ALSO....

- In hotter months do anything you can (use drapes, eat cool meals etc.) to **avoid heat from building up inside the office**. It will help you reduce the energy your ventilation system consumes.
- By using time settings **make sure fans are not running when they are not required**. Unnecessary ventilation wastes energy and also removes heat from the building.
- Use **sliced lemons and baking soda** to get a clean scent in the kitchen.
- If you want to replace furnishings in your building, **choose products that do not release any kind of chemicals**.
- **Manage pests without pesticides**. There are several resources and methods of pest control that do not require the widespread application of pesticides.



DID YOU KNOW?

Ventilation accounts for around 30% of heat loss in most commercial buildings (an estimated 25% in industrial buildings) so do it with care.

FURTHER READING AND IDEAS

[Indoor Air Quality and the Use of Energy in Buildings](#)

[5 Ways To Improve Indoor Air Quality](#)

[Improving Indoor Air Quality at Work](#)

[Heating, ventilation and air conditioning \(HVAC\) energy efficiency](#)

SOURCES

Antal, O., Vadovics E. (2005) Zöld iroda kézikönyv. [Green Office Handbook]. KÖVET-INEM Hungária, HU

<https://www.carbontrust.com>, <http://www.webmd.com>,

<http://www.integrativehealthcare.org>, <http://gogreenplus.org>, <http://www.homeselfe.com>

PICTURES

<http://ecolotclean.com/>, <https://sk.pinterest.com>, <https://www.carbontrust.com>,

<https://www.cool-farm.com>

