

TIP OF THE WEEK

VENTILATION AND AIR QUALITY

Ventilation and indoor air quality

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

- ...keep the floors clean vacuum and mop up the dust and dirt, get rid of chemicals and allergens.
- ...put a large floor mat at every door it reduces the amount of dirt, and other pollutants from getting into the office.
- ...separate significant emission sources, such as large copy machines, from occupied spaces.
- ...use natural, non-toxic detergents, cleaning agents, air freshners.
- ...keep a healthy level of humidity of around 40%-60% to keep dust and mold under control.
- ...use natural ventilation, let in fresh air.
- ...change the filters With dirty filters the ventilation system can not work properly and wastes a lot of energy.
- ...make the office green with plans they purify the air and cheer you up ©

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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 in your office.



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 Qualitys

- 1. 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.
- **2. Put a large floor mat at every door.** It reduces the amount of dirt, and other pollutants from getting into the office.
- **3. Significant emission sources**, such as large copy machines, **should be separated from occupied spaces** and air intakes.
- **4.** Do not use any detergents, cleaning agents, air freshners with synthetic fragrances look for natural, non-toxic, eco-labelled products. Stop using aerosol sprays (carpet cleaners, furniture polish, and air fresheners).
- **5. Forbid smoking in the office if it is not yet forbidden by law.** Cigarette smoke contains more than 4,000 chemicals.
- **6. Keep a healthy level of humidity of** around 40%-60% to keep dust mites and mold under control. A dehumidifier (and air conditioner during summer months) can reduce moisture and effectively controls allergens.
- **7. Use natural ventilation, let in fresh air**. If your colleagues suffer from pollen allergies, keep the rooms ventilated with a filtered air- conditioning system.
- **8.** Change the filters The dirtier a filter is, the harder it is for the ventilation system to work properly it wastes energy and increases your utility bills. It can also lead to serious health issues since dirty filters affect the quality of your air, too.
- 9. Make the office green with plans they purify the air and cheer you up @
- 10. 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 <u>baking soda</u> 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?

<u>Ventilation accounts for around 30% of heat loss in most commercial buildings</u> (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

Improving Indoor Air Quality at Your Workplace

Source(s):

https://www.carbontrust.com/resources/guides/energy-efficiency/heating-ventilation-and-airconditioning-hvac/#ventilation

http://www.webmd.com/lung/features/12-ways-to-improve-indoor-air-quality http://www.integrativehealthcare.org/mt/archives/2009/02/11_tips_for_imp.htmls ttp://eogreenplus.org/green-sustainable-business-tips-resources-ideas/breath-of-fresh-airimproving-indoor-air-quality-at-your-workplace/

http://www.homeselfe.com/how-to-make-your-ventilation-energy-efficient/

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