



# Ventilation guide

### 1. Problem:

Increasingly, tenants are having problems getting fungus on their walls. In most cases, the cause is either insufficient or improper ventilation of the apartment. This leads to a surplus of humidity that condenses as water on the wallpaper resulting in the growth of fungus. Only rarley does the fungus come from damaged water pipes or roofs.

### 2. Why does fungus grow?

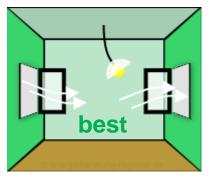
Fungus spores are present everywhere. However, only under the right humidity and temperature conditions, the fungus actually grows on wallpaper, on walls or silicon seams. There is an especially high danger of fungus growth in places of low circulation (behind furniture) or in cold spots (the bottom of walls or around the windows).

# 3. Why is there too much humidity?

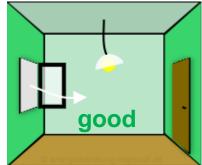
Water is always present in the air and it condenses on cold surfaces. Every person, plant, laundry, cooking as well as bathing generates humidity. Typically, over a 24 hour period, 10kg of water are generated in an apartment. This amount of water has to be transported out of the apartment via ventilation. Ideally humidity levels should be at 55–60%. Warm air in a bathroom can have up to 100% humidity (this is when your mirror fogs). Sometimes we encounter warm humid apartments with almost 85% humidity – this is a sure recipe for fungus growth. Don't heat your apartment over 22°C, because the warmer air results in higher humidity. Also if it is too cold (below 17°C), you also risk fungus as the walls are getting cold enough for the humidity to condense into water.

# 4. How to ventilate correctly

The only way to reduce the humidity is to ventilate. There is no "breathing" of walls or windows. Cooler air outside the room always has less humidity.



Cross ventilation: 5 min, 3-4 times a day → This loses little heat and is most efficient



Ventilation: 10 min, 3-4 times a day



**Tilted window :** You need a lot of time (30-75 min) for sufficient ventilation to happen.

→ Wasted energy and danger of fungus especially around the windows

#### 5. To remember:

- 1) Keep sleeping room at 17°C, living rooms at 19-21°C.
- 2) Ventilate sleeping room in the morning after getting up. Ventilate bathroom after the shower, ventilate kitchen after cooking, ventilate living room 3-4 times a day.
- 3) Get a room thermometer that also indicates the relative room humidity (relative Luftfeuchtigkeit=RLF in %). Keep the humidity under 60%.
- 4) Always fully open the windows for ventilation, don't leave a window tilted (unless it is hot in summer).
- 5) Don't block ventilation via curtains, don't set furniture too close to the wall (always leave 5cm space).
- 6) In summer, only ventilate in the mornings and evenings to avoid getting even more humidity. Keep your cellar windows closed in summer.
- 7) Dry the tiles and the shower walls after a shower or bath.
- 8) Check you apartment regularly and call immediately if you see fungus.