Be aware. And prepared.

OPTIMAL HUMIDITY LEVELS
IN LIVING AND WORKING SPACES

Dry air in overheated indoor spaces present an important stress factor for our airways as it dries out our mucous membranes and such inhibits our immune response. This causes an increase in airway infections, dry and itchy nose and nose bleeds. The best way to avoid dry mucous membranes is to improve the air quality in rooms by achieving optimal humidity levels.

The following table gives you an overview of the key points to identify optimal humidity levels in living and work spaces.

Optimal Humidity Levels		
Room	Optimal temperature	Optimal humidity level
Living rooms & office areas	20 °C	40 - 60 %
Bedrooms	16 - 18 °C	40 - 60 %
Kitchen	18 °C	50 - 60 %
Bathroom	23 °C	50 - 70 %
Basement	10 - 15 °C	50 - 65 %

Naturally, humidity levels in kitchen and bath rooms are sightly higher and can even increase further during cooking and showering. This is no problem, as long as such increased levels are not permanent.

During the summer months, humidity values are at the upper limit. The warm humid outer air cools down when moving indoors, which then increases the "relative" humidity. During the winter months, the opposite occurs, when cold air from outside is warmed by heating systems.

Things to know about humidity
• The healthiest indoor climate is at a relative humidity level of 50% and 20°C room temperature.
• Humidity levels indoor should never be lower than 30%.
• Some mould fungi (mildew) propagate from 70% humidity.
• Did you know that we perceive air with higher humidity levels at the same temperature as warmer?

Regulating humidity

The most important prerequisite is to measure humidity levels. That is the only way to find out, which measures to take to achieve optimal humidity levels. Humidity levels can be too high or too low. The easiest way to counteract the increased humidity levels especially in bathrooms is correct airing. The aim of airing is to regulate

Correct airing means:
- Opening windows completely, not just tilting them
- Airing across an entire living and working space (open windows at the opposite end to allow for complete air exchange)
- Airing in the early morning hours during the warm summer months
- Not airing during rainy days if airing is needed to lower humidity levels (mouldy bathrooms, basements, etc.)

As airing is used to exchange "used air" and replace it with oxygen rich air from outside. This means airing has different goals during the winter and the summer months, effective airing must be adjusted to the seasons.

Airing during the winter months

During the cold winter months, it is important to keep living spaces at a comfortable level, even when not in the house or office during the day. Cold walls take a long time to warm up and thus counteract creating a comfortable room climate.

Typically, air in living spaces during the heating period is too dry. Increased airing could be counterproductive as it might bring in cold outdoor air which is a bad humidity carrier.

Easy ways to increase humidity levels in the winter are
- Reduce the room temperate according to the table at the beginning
- Allow water to evaporate by drying laundry in living spaces
- Bring water to a boil without a lid on
- Use the high humidity levels after bathing or showering and open the bathroom door and not the windows, so that humidity can move into other rooms
- Hang a container on the radiators, so that the water can evaporate (keep in mind that the water in the container must be exchanged regularly to avoid germ growth, the same problem as with electrical humidifiers)
- Buy hydroponic plants to increase humidity levels. When buying regular plants, keep in mind that only plants that need a lot of water are able to release vapour, like umbrella palm, or other papyrus plants. Spider plants are also helpful.

During the winter, airing should be shorter than during the summer to prevent a drop in room temperature. The most effective approach is
- to open windows completely
- to air for five to maximum 10 minutes
- to open windows on the opposite side of a room, a home or an office to achieve ideal air circulation
- to do this process, in German called "Stosslüften" 3 times daily, ideally the first time early in the morning and the last time just before going to bed.

Airing during the summer months

Because summer can easily be very warm and humid, a climate we don't consider too comfortable, airing during the summer months has to be different than during the winter. But jut like during the winter, "Stosslüften" is the most effective approach:

- open windows wide
- open windows on the opposite side of a room, in opposite rooms, a home or an office to achieve ideal air circulation
- open windows in this manner in the early morning hours and the late evening, to ensure that hot, humid summer temperature don't disturb a comfortable room climate.
- to air for five to maximum 10 minutes, then close windows and turn on heating again
- leave the windows open for a good 25 minutes. In bedrooms, windows can remain open all night. During the day, air only after showering, bathing or if humidity levels increased too much after cooking.

Airing against mould

Airing to fight mould or to prevent it, means that airing has to lower humidity levels. The most important thing is good air circulation: air immediately after showering, bathing, ironing or cooking if you notice an increase in humidity levels.

Water condensation on the windows are a sign of incorrect airing.

Remember, achieving a healthy indoor climate with a humidity level of 50% and 20°C room temperature is not just good for your home but equally good and important for the health and well-being of your airways.