ESIMAG

Healthier Living – Proper Ventilation

The problem

Complaints about condensation accumulate mainly in the winter half-years. The consequences are mould infestation and moisture damage to walls.

The cause

Room air is full of invisible water vapour (moisture).The warmer the air, the more moisture it contains. If a building component cools down too much, condensation will form at this point. This can affect windows or insufficiently thermally insulated exterior walls.

The danger of surface condensation is greater the more humid the room air is and the colder the surface of the building component. The lower the air exchange with the outside air is and the more sources of humidity such as bathrooms, showers, flowers, kitchens, wet laundry etc. are present, the more humid the room air is.

Ventilation as a countermeasure

With our new tight windows, the level of room humidity has increased drastically. This makes «proper ventilation» all the more important..
«Proper ventilation» should be energy-saving, effective and should improve indoor air quality and promote well-being at the same time.

Proper ventilation means

3 to 4 times a day, for 5 to 6 minutes (10 minutes at the most) the windows must be opened completely (forced ventilation). Short cross ventilation (draught) is particularly effective. These measures remove a lot of moisture in a short period of time and prevent the wall and ceiling surfaces from cooling down which in turn saves a lot of heating energy. Even in rain and fog, the outside air is less humid than the air inside the apartment.

Caution with tilting windows, window sills and curtains

A window sill should be kept free to allow the windows to be fully opened. During the heating period, the windows in each room must be opened fully for a short time. This is not possible if the window sill is full of objects. In the winter months, tilting the windows for ventilation has very detrimental consequences. The exchange of air is very sluggish. The room surfaces around the window and the floor cool down considerably resulting in condensation and damp. This leads to mould growth and higher heating costs.

For optimal heat distribution within the rooms, make sure that no curtains are hung in front of the radiators. Otherwise the circulation of warm air is restricted, making the heating ineffective.

Proper ventilation during longer absences

During the heating period, please refrain from keeping the windows open in the tilt position for any extended period of time. Windows may be left tilted in the Summer months.

Room temperature

Do not lower the room temperature excessively. Attempts at excessive energy-saving can lead to condensation, water damage and hygienic problems (mould).

Recommendation: approx. 20° celsius for the living rooms and approx. 18° celsius for the bedrooms.

PROPER VENTILATION (FORCED VENTILATION) SAVES ENERGY, IS HYGIENIC AND AVOIDS MOISTURE DAMAGE AND MOULD IN LIVING SPACES.