DOORDEC
TO WELCOME AND PROTECT

ANNEX TO INSTRUCTIONS FOR USE AND MAINTENANCE INSTRUCTIONS – Condensate

Important information about the formation of condensate.

Formation of condensate, some examples from daily life

Take a bottle out of the fridge and place it on the table. You will see that the bottle will become foggy within a short period of time. Your glasses will become foggy as soon as you step into a heated room from outside. This is due to the fact that warm air absorbs considerably more moisture than cold air. When coming in contact with a cool surface, warm air cools and the amount of moisture which cannot be absorbed at the specific lower temperature is deposited on the surface of the glass in the form of condensate. This phenomenon is especially common if a high level of humidity comes in contact with a low temperature.

Condensate on a door or window

Depending on the purpose and use of the room, high air humidity may occur in bathrooms, kitchens, hallways, staircases, or cellars. Why does condensate mainly form when the weather is cold? Even on modern doors and windows and sealed units with good thermal characteristics. The reason is actually simple. The warmer the air, the more it binds moisture. Coming in contact with the cool surface of the window, some of the moisture contained in the air is condensed into water. This problem primarily occurs in winter when the outdoor temperatures are low. However, condensate may also be generated in summer when the outdoor air is very damp and the indoor temperature is relatively low.
The reason why condensate occurs on some windows, but not on others, is the specific moisture content of the air in the specific apartment or room. Surprisingly, condensate may form on a new, recently installed door, while you may remember that a lot less steam was condensed into water on the old door. This may mean, among other things, that the density of new doors is considerably higher than the density of old ones, due to which the aeration of the rooms has actually become a lot poorer after the replacement of the old doors that let air pass through.

Temporary, non-permanent condensation is normal:

- during periods of especially high air humidity;
- in rooms with high humidity (e.g. bathroom, basement, utility rooms with sewage wells or drains);
- in unheated hallways connected to a basement or garage;
- during unusually cold weather;
- during renovation or construction works, when large amounts of water are needed for using building materials (concrete, gypsum, flooring, plaster). As these materials dry (which may take over a year), the indoor climate will temporarily be more humid, leading to a higher risk of condensation.

Specific recommendations for solving moisture problems on steel doors:

1. Improving ventilation

- Install sufficiently powerful ventilation systems to reduce indoor humidity.
- Make sure existing ventilation openings are not clogged or blocked.

2. Optimizing heating

- Maintain a consistently warm temperature near doors to reduce the temperature difference between the doors and the room.

3. Dehumidifiers

- Install electric dehumidifiers in the room or use chemical moisture absorbers to help keep humidity under control.

4. Regular maintenance

- Periodically check door seals and surface coatings to ensure they are in good condition.
- Clean door surfaces regularly to remove dirt caused by condensation and keep the door in good condition for longer.

How to get rid of condensate?

In order to prevent the formation of condensate, it is above all necessary to make sure that the air humidity in the rooms is not too high and to keep the temperature of the indoor surface of the door or window as high as possible. Heating and regular aeration are the prerequisites for preserving an optimum indoor micro climate. A foggy door or window is a sign that the room should be ventilated and that the air humidity level in the room is high.
The warranty will not cover the formation of condensate on the indoor surfaces of doors, as this is caused by unbalanced indoor micro climate.