

Statement April 9, 2020

In times of Corona, Passive House ventilation is also advantageous

The ventilation system (MVHR) in Passive House buildings usually (*) draws in fresh air from the outside to ventilate our indoor rooms. Even in times of corona, people are allowed to move about outside in the open air as long as social distancing advice is heeded, because all viruses that people exhale are strongly diluted and the virus concentration in the outside air is low enough to be harmless.

The situation at the moment shows quite clearly why the Passive House Institute ALWAYS recommends the ventilation of Passive House buildings with fresh outside air, and why we advise against the use of recirculated air ventilation(*). The outside air is 'only' polluted by dust, which is filtered effectively by the fine-class filters (class F7...F9 is recommended by Passive House Institute) placed in the outside air ducts.

There is a statement from the German Society of Ventilation (FGK, www.fgk.de), which clearly says that ventilation systems (MVHR) running with outside air should therefore NOT be switched off and the outside air flow rate should NOT be reduced.

To understand this, it is important to compare with conventional buildings without a controlled ventilation system: all indoor rooms in these buildings should also be very well ventilated at present (with outside air). Otherwise virally contaminated air could accumulate in interior spaces. In Passive House buildings with properly installed filters, the intake air is even cleaner.

The Passive House Institute therefore still recommends the proper operation of outdoor air ventilation systems, even in times of Corona.

(*)Important hint: Any kind of recirculated air ventilation system is only acceptable in rare cases and for special building types, and only if absolutely necessary. The statement of the FGK also states unequivocally that the recirculating air operation in such buildings must currently be reduced to the absolute minimum and the recirculated air must then be well filtered:

https://www.fgk.de/images/Aktuelle_Dokumente/2020/RLT_Covid19_V1_200324.pdf