eu.bac european building automation controls association

INDOOR ENVIRON-MENTAL QUALITY

Why the EPBD should begin with monitoring

Developing an extensive and appropriate methodology for establishing optimal values for Indoor Environmental Quality (IEQ) parameters across the EU would require more time than the current Energy Performance of Buildings Directive (EPBD) review allows for. Therefore we suggest taking the first step, by introducing a minimum set of parameters that should be monitored. Monitoring would open the door for possible parameter value requirements at national level or at EU level in the future. Furthermore, making the parameter values visible to occupants would incentivise intervention and optimisation of IEQ.



WHAT REQUIREMENTS?

Mandatory minimum requirements from 2025 for new and existing buildings of continuous monitoring, evaluation and reporting of IEQ parameters including means to make these values visible to the occupants and to inform them about deviations between actual and target values.

WHICH BUILDINGS?

a) medium-large non-residential buildings, irrespective of their use (>290kW or >70kW)
b) all public buildings
c) all buildings that serve a specific function, such as schools and hospitals

Currently, existing and non-residential buildings with an effective rated output >290kW must be equipped with BACS capabilities by 2025. We suggest maintaining consistency between the scope of these requirements and the requirement to make IEQ parameter values visible to the occupants.

WHAT PARAMETERS?

- Carbon dioxide (CO2)
- Relative Humidity (RH)
- Temperature (T)
- Particulate Matter (PM1)
- Particulate Matter (PM2.5)
- Daylight Illuminance Level (DIL)
- Volatile Organic Compounds (VOC)

WHAT ABOUT THE RESIDENTIAL SECTOR?

IEQ in the residential sector should be improved through EPBD Art. 14/15 par. 5. These voluntary requirements on electronic monitoring and effective control functionalities have not been implemented by any Member State, therefore we suggest:

1) Make these requirements mandatory for residential buildings with an effective rated output >70kW
2) Complement with other capabilities (including “remote access to data”, e.g. from an application on a mobile phone/PC)