



Daikin proposal regarding Technical Assistance Study for the Ventilation Product Group

“Commission Regulation 1253/2014 and Commission Delegated Regulation 1254/2014”

GENERAL

In view of the Draft report (Task 1-3, planned for July 2015) concerning the Technical Assistance Study for the Ventilation Product Group, Daikin proposes to include ISO/FDIS 16494:2014 (Heat recovery ventilators and energy recovery ventilators – method of test for performance) to the list of Transitional Methods. We believe that the standards that are currently included in the list are insufficient when it comes to specifying the tracer gas method for the measurement of the unit exhaust air transfer rate.

RECOMMENDATION

- 1) include in the transitional method a row that states tracer gas method and the reference to ISO 16494
- 2) clearly indicate that current EN standards shall be harmonised and should take ISO 16494 as the basis when including the tracer gas method as a method to determine exhaust air transfer rate.
- 3) Include this requirement in the mandate for ventilation units to ensure that this is duly respected.

BACKGROUND

1. The legal text clearly refers to the tracer gas method in ANNEX V clause 1.(o). The method should therefore be recognised and embedded in all applicable harmonised standards.
2. Heat recovery ventilation units apply different types of technologies to exchange the heat between indoor air and outdoor air. Some units apply metal heat exchangers, other units apply special thin film. Current EN standards require a pressure test for determining the leakage of heat recovery ventilation units. The current EN standards describes the same test pressure independent of the size of the unit or the type of heat exchanger. This test pressure exceeds the normal working pressure of some units, for example, units of smaller size. This makes that the leakage value obtained is not representative for the leakage present during normal operation of the unit. Moreover, this high pressure damages the heat exchanger of some units, resulting in leakage of the unit. It is clear that the test described in current EN standards is not realistic and discriminates certain technologies, for example, smaller units and units using thin film heat exchangers.
3. Current referred standards seem to be outdated; e.g EN 308 latest publication is from 1997. EN 308 already mentions the traces gas technique, for example, in section 5.3, Note 3: ‘the tracer gas technique can also be applied for measuring the internal exhaust air leakage for category I and in some cases for category II’. However, no clear description of the tracer gas technique is provided in the standard. That is why we propose to elaborate the tracer gas method in EN 308 based on the specifications given in ISO 16494.