European Platform for Multifunctional Units

17.05.2021

Proposal for a Standardization Strategy for Multifunctional Residential Ventilation Units

Considering the previous comments made by the Platform:

- **Study on MFU**
- **Information Requirements for MFU**
- **Definitions and Functions of MFU**
- **EN 16573 definition for a multifunction ventilation unit section 4 and EVIA definition overview**

A further update of test and classification/mandatory standards for multifunctional residential ventilation is needed. The following proposal considers:

- **Strategy and Requirements for MFU**
  - MFU shall be in the scope of LOT 6
  - Information requirements in the first step (upcoming revision – called 20X1)
    - Basis is the current EN 16573
    - Keep COP and EER for heat pumps
  - Further requirements in the second step (next revision - called 20X2)
    - Minimum requirements
    - Ventilation function according EN 13142
    - Implementing SCOP and SEER according EN 14825 (first proposals have been developed)

**Update for the upcoming Ecodesign 20X1:**

EN 16573 shall be updated to consider all relevant products and to describe the test procedure needed to fulfil information requirements of EU 1253/revised.

Keep COP and EER as described in EN 16573.

EN 13142 shall be updated to implement the calculations, declarations etc. from regulation and EN 16573 needed and prepare a new harmonised Annex ZC for multifunctional units.

**Update for the next Ecodesign 20X2:**

EN 16573 shall be updates to consider SCOP and SEER in analogy with EN 14825.

Calculations and corrections for the ventilation function (fully integration in EN 13142).

Harmonised Annex ZC.
The Flow chart illustrates the proposed procedures to update the standards:

- Standards in the framework of LOT 6:
  - **EN 13141-7:2011-07-13**
    Ventilation for buildings - Performance testing of components/products for residential ventilation - Part 7: Performance testing of a mechanical supply and exhaust ventilation units (including heat recovery) for mechanical ventilation systems intended for single family dwellings
  - **EN 13142:2014-07-23**
    Ventilation for buildings - Components/products for residential ventilation - Required and optional performance characteristics
  - **EN 16573:2018-02-21**
    Ventilation for Buildings - Performance testing of components for residential buildings - Multifunctional balanced ventilation units for single family dwellings, including heat pumps
• Standards in the framework of LOT 1/2/10:
  
  o **EN 14511-1 to 4:2019-02-20**  
    Air conditioners, liquid chilling packages and heat pumps for space heating and cooling and process chillers, with electrically driven compressors
  
  o **EN 14825:2019-12-04**  
    Air conditioners, liquid chilling packages and heat pumps, with electrically driven compressors, for space heating and cooling - Testing and rating at part load conditions and calculation of seasonal performance
  
  o **EN 16147:2017-12-27**  
    Heat pumps with electrically driven compressors - Testing, performance rating and requirements for marking of domestic hot water units. (Consolidated version).

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