

2011-11-28

ENTR Lot 6 –
Air Conditioning and
Ventilation Systems
Mr Rene Kemna
e-mail: r.kemna@vhk.nl

Dear Mr Kemna,

On 17 November the manufactures of the Nordic countries had an expert meeting to discuss ENTR Lot 6. The main purpose of the meeting was to discuss what parameter of performance that would be preferred, when ranking the use of energy of air handling units with heat recovery.

The conclusion of the meeting was that SFP is the best parameter to use when defining the performance of supplying air to the building.

The most important factor to make the fan operation more energy efficient is to lower the pressure drop, both in the system as well as in the unit. In the northern countries the demand of a maximum allowed SFP value has helped the ventilation and construction industry to focus on the essential factor when it comes to a ventilation system; supplying the buildings with the required amount of air at a minimum use of energy.

Due to the fact that SFP directly grades the amount of used energy to supply air, it's easy and logical to understand. To be able to remove the worst products from the market, some additional details need to be clarified about the SFP factor. This can be achieved by a SFP demand for different system pressures, including compensation for the components in the AHU. There are big differences in system pressures in Europe. The ErP directive should not be the only driving force for energy efficient ventilation systems, but a strong link between the ErP and EPBD is essential to assess both AHU as a **product** and its performance **in the system**.. It's also important that components that are integrated in the AHU don't discredit the product so the component is moved to a different location in the system instead..

EN13799 can be used for classification of AHU. The necessary classes for external pressure and compensation of integrated components are defined in the directive.. We are convinced that SFP will drive the market to use less energy for ventilation.

The use of air velocity and reference power according to EN13053 will not give the same effect. Low velocity in the filter section is not a guarantee for low internal pressure drop and will not reward innovative solutions to lower the internal pressure drop. A poorly designed product with high pressure drop will not be discovered by the reference power method.

We are looking forward to your opinion and further detailed discussions.

Britta Permats

Britta Permats
Svensk Ventilation, Sweden

Mats Eriksson

Mats Eriksson
VKE, Norway

Ilkka Salo

Ilkka Salo
FAMBSI, Finland

Christen Galsgaard

Christen Galsgaard
Dansk Ventilation, Denmark