

November 2012

# RECOMMENDATION concerning PUBLIC ENQUIRIES for AIR FILTERS

Air filters are a very important and significant component of air handling units. They are important to the air handling system with respect to functionality and energy aspects. The most important function of an air filter is to clean the air, protect the air handling equipment and create a clean indoor air quality. They also have to fulfil demands and criteria so that the product fit into the air handling installation. Energy conservation in design and operation is of high importance. Part of the public enquiry specifications objective is to also keep the energy consumption at a low level. However, it goes without saying that the filtration efficiency of the filter must never be lowered on behalf of the energy saving. The combination of an efficient particulate air filter, IAQ requirements and low energy consumption put the focus on the correct specification and validation of air filters. For this purpose Eurovent has developed a recommendation covering the most important parameters and demands that should be taken into consideration when writing a valid requisition, public tender or enquiry for air filters. It is important that customers are provided with a tool enabling them to compare the different quotations and filter brands in an unbiased way.

# E U R O V E N T EUROPEAN COMMITTEE OF AIR HANDLING, AIR CONDITIONING AND REFRIGERATION EQUIPMENT INDUSTRIES

# 1. Mandatory demands

#### 1.1 Products

- Independent test report, to EN 779, latest version. Maximum 5 years old and according to latest version of the standard
- Third-party certification of the initial pressure drop, filter class, initial efficiency, ME value (minimum efficiency value, ME being discharged efficiency, initial efficiency or otherwise lowest measured efficiency), energy use and energy class
- Incinerable air filter according to national law and regulations
- Eurovent Energy Efficiency Classified and Certified by Eurovent Certification Programme. Eurovent label displayed in documentations and/or on the boxes
  - Alternative to the above when a total cost LCC is required:
     LCC EUROVENT revised REC 10, Calculation of Life Cycle Cost for Air Filters
    - Average pressure drop has to be noted and based on initial pressure drop from EN 779 test report, latest version, and integrated value according to EUROVENT Document 4/11, based on EN 779:2012
- Gaskets have to be included with filters, depending on local needs
- Recyclable cardboard boxes (for example: connected/partnership to REPA, Sweden or similar national and European regulations)
- Organisation for education / technical advice regarding improvement of air handling equipment during the period of the contract between customer and supplier
- Terms of Delivery, Incoterms 2010
- All chemical substances used to build a filter shall be in compliance with European REACH, RoHS and similar regulations
- Plastic bag for disposal of used filters shall be attached in package (national requirements)
- Filters shall fulfil all hygienic requirements according to the standard EN 13779 and/or the German Guideline VDI 6022. Design and construction of the air filters and filter frames shall allow for easy and safe assembly thus causing no damage and ensuring tight fit of the air filters in their frames over the entire time of operation of the air filter.

## 1.2 Quality / Environment

- Bid Package has to be approved and registered by national recycling system if required by national law.
- ISO 9001/14001 certification

### 1.3 The supplying company

- Sound finances (e.g. a good rating according to Dun and Bradstreet, Moody, Standard & Poor or comparable)
- Certificate from Credit- and Business Information Company. Maximum 3 months old (national version)
- Certificate of registration (national version)
- Tax certificate (national version)
- Liability insurance

# 2. Specifications to be included in the enquiry

In addition to the "mandatory demands" the air filters must be specified in a similar way by all quoting companies to be able to be compared.

#### State the following:

- Front dimension
- Depth of filter, (in case of bag filters + 50 mm)
- Quantity required of each filter type
- Filter class according to EN 779:2012
- Initial Efficiency
- ME value (Minimum efficiency)
- Energy Efficiency class certified by Eurovent Certification for filters M5 to F9
- LCC method and detailed data have to be stated by customer in the enquiry EUROVENT Recommendation 10 – Revised LCC. Average pressure drop has to be calculated from EUROVENT Document 4/11.
- Total purchase value in local currency (e.g. Euro/year or local currency)

### 3. Definitions of the technical terms

EN 779:2012: European standard for testing air filters for general ventilation norm

**LCC:** (Life Cycle Cost) The calculation method for total cost of running an air filter during its life time

**Eurovent Certification:** Performance certification of air filters, in classes M5 - F9, that guarantees all figures and values in product sheets, brochures and other marketing materials according to real performance of the product tested by independent laboratories. The method relies on tests according to EN 779.

Certified companies and products are listed on the Eurovent Certification website <a href="https://www.eurovent-certification.com">www.eurovent-certification.com</a>

**National recycling scheme:** Producers are responsible for packages of plastic, metal, paper / card board and corrugated cardboard.

**REACH**: the Registration, Evaluation, Authorisation and Restriction of Chemicals, is the new European Chemicals Policy. It will introduce major changes in the way chemicals are managed throughout the EU Member States. The new EU chemicals legislation, REACH, was formally published at the end of 2006 and entered into force on June 1st 2007. REACH is set to bring major changes both in the global chemicals industry and in any industry that uses or processes chemicals. It will affect organisations at every point of a production chain, from chemical manufacturers to chemical distributors to companies assembling products from component parts.

Www.reach.com

**Energy Efficiency Classification:** Eurovent Certification Programme includes, from January 2012, A-G classes for annual energy consumption, calculated according to EUROVENT Document 4/11(Energy Efficiency Classification of air filters for General Ventilation Purposes).

**EUROVENT REC 10, Calculation of Life Cycle Cost for Air Filters:** A life cycle cost calculation recommendation by Eurovent, and a tool to minimize the running cost of an air handling installation.

**RFC 19** 

For more information contact: Sylvain COURTEY

EUROVENT PGs Secretariat 53 rue de Turbigo, 75003 PARIS Tel 33 1 4996 6980; Fax 33 1 4996 4510