

Ventilation for buildings - Terminals - Performance testing of louvres subjected to simulated rain

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13030:2002 sisaldab Euroopa standardi EN 13030:2001 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 19.04.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13030:2002 consists of the English text of the European standard EN 13030:2001.</p> <p>This document is endorsed on 19.04.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This European Standard specifies a method for measuring the water rejection performance of louvres subject to simulated rain and wind pressures, both with and without air flow through the louvre under test. For the purpose of tests in this standard, a 1000 mm x 1000 mm section of weather louvre or the nearest possible blade increment is considered.</p>	<p>Scope:</p> <p>This European Standard specifies a method for measuring the water rejection performance of louvres subject to simulated rain and wind pressures, both with and without air flow through the louvre under test. For the purpose of tests in this standard, a 1000 mm x 1000 mm section of weather louvre or the nearest possible blade increment is considered.</p>
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Võtmesõnad: climatic protection, flow rates, indexes, irrigation, measuring instruments, passages, rating tests, service installations in buildings, symbols, terminal devices, testing, thermal environment systems, water repellency, weather protection systems, ventilation

ICS 91.140.30

English version

Ventilation for buildings - Terminals - Performance testing of louvres subjected to simulated rain

Ventilation des bâtiments - Bouches d'air - Essai de
performance des grilles d'air extérieur soumises à une pluie
simulée

Lüftung von Gebäuden - Endgeräte - Leistungsprüfung von
Wetterschutzblenden bei Beanspruchung durch Beregnung

This European Standard was approved by CEN on 18 August 2001.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 156 "Ventilation for buildings", the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2002, and conflicting national standards shall be withdrawn at the latest by April 2002.

The annexes A, B and C are normative. Annex D is informative.

Warning

Attention is drawn to the possible risks associated with legionella, if recirculated water is used or biofilms are allowed to develop within the facility during weather louvre testing, in order that appropriate precautions are taken to safeguard the health of those involved.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies a method for measuring the water rejection performance of louvres subject to simulated rain and wind pressures, both with and without air flow through the louvre under test. For the purpose of tests in this standard, a 1000 mm × 1000 mm section of weather louvre or the nearest possible blade increment is considered.

Weather louvres are designed to restrict the passage of water during rainfall while allowing the passage of air into or from an air distribution system or part of a building. They are used in a wide range of applications, where there may be differences in wind speed and direction, levels of local turbulence, rate and droplet size, distribution of rainfall and surface water flow from the surrounding structure. It is impractical to consider a standard test procedure simulating the whole range of likely conditions, but this standard provides for heavy rainfall directed on to the louvre surface, with simulated wind pressures. This provides a common basis on which to compare the water rejection performance of weather louvres of different designs. This standard is not intended for the evaluation of weather performance of pressure relief dampers.

The purpose of tests incorporated in this European Standard is as follows:

a) Weather tests

To establish the weather louvre effectiveness when subjected to wind pressure at various air flow rates.

b) Discharge and Entry loss coefficient/Pressure requirements

To establish the air pressure loss through the weather louvre at various air flow rates and by calculation the Discharge and Entry Loss Coefficient.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references the subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 24185, *Measurement of liquid flow in closed conduits — Weighing method (ISO 4185:1980)*

CR 12792, *Ventilation for buildings — Symbols and Terminology*

EN ISO 5167-1, *Measurement of fluid flow by means of pressure differential devices — Part 1 orifice plates, nozzles and venturi tubes inserted into circular section conduits running full (ISO 5167-1:1991)*

ISO 5221, *Air distribution and air diffusion — Rules to methods of measuring air flow rate in an air handling duct*

ISO 5801, *Industrial fans — Performance testing using standardized airways*