

## **Ventilation for buildings - Ductwork hangers and supports - Requirements for strength**

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12236:2002 sisaldab Euroopa standardi EN 12236:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 12.07.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12236:2002 consists of the English text of the European standard EN 12236:2002.</p> <p>This document is endorsed on 12.07.2002 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><b>Käsitlusala:</b></p> <p>This standard specifies requirements for the construction and application of supports for sheet metal ductwork in ventilation and air conditioning systems.</p>	<p><b>Scope:</b></p> <p>This standard specifies requirements for the construction and application of supports for sheet metal ductwork in ventilation and air conditioning systems.</p>
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**ICS** 91.140.30

**Võtmesõnad:** air distribution, mechanical engine, service installations in buildings, sheet materials, sheets, spaced, specification (approval), specifications, strength of materials, supports, suspensions, testing, thermal environment systems, ventilation, ventilation ducts

ICS 91.140.30

English version

## Ventilation for buildings - Ductwork hangers and supports - Requirements for strength

Ventilation des bâtiments - Supports et appuis pour réseau  
de conduits - Prescriptions de résistance

Lüftung von Gebäuden - Aufhängungen und Auflager für  
Luftleitungen - Anforderungen an die Festigkeit

This European Standard was approved by CEN on 29 December 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, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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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 July 2002, and conflicting national standards shall be withdrawn at the latest by July 2002.

The standard is one of a series of standards for ductwork used for ventilation and air conditioning of buildings for human occupancy.

The position of this standard in the field of mechanical building services is shown in Figure 1.

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, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

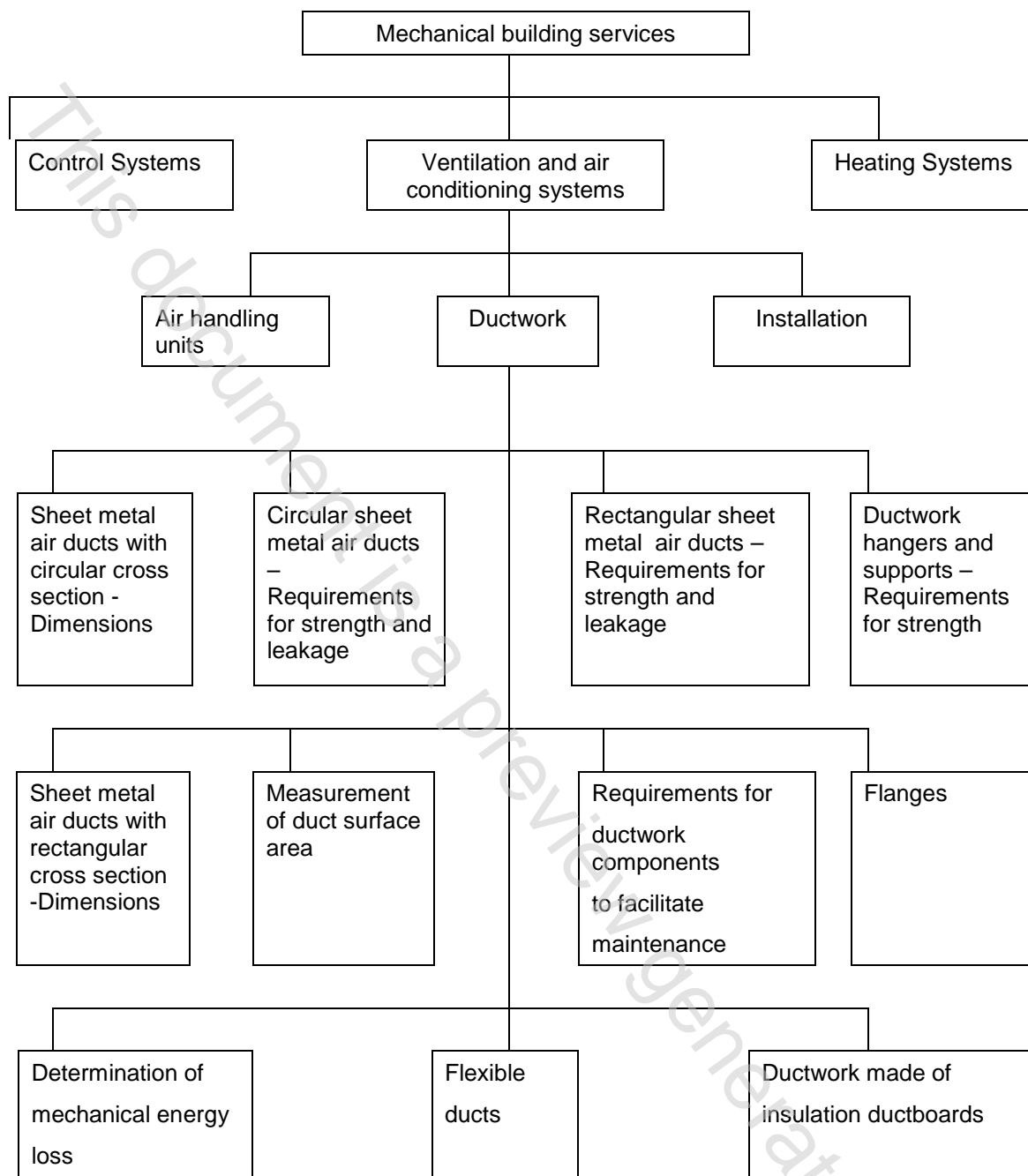


Figure 1 – Position of EN 12236 in the field of mechanical building services

## 1 Scope

This standard specifies requirements for the construction and application of supports for sheet metal ductwork in ventilation and air conditioning systems.

The standard applies to any shape of ductwork (rectangular, circular and oval), and components used in ventilation and air conditioning systems in buildings.

The standard also takes into account insulation loads, safety factors, imposed loads (cleaning and maintenance), vibration isolation, and corrosion resistance.

The standard does not consider loading due to earthquakes.

The standard does not deal with fire requirements and fire protection of ducts and support systems.

## 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, 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).

CR 12792	<i>Ventilation for buildings - Symbols and terminology.</i>
EN 1505	<i>Ventilation for buildings - Sheet metal air ducts and fittings with rectangular cross section – Dimensions.</i>
EN 1506	<i>Ventilation for buildings - Sheet metal air ducts and fittings with circular cross section – Dimensions.</i>
ENV 12097	<i>Ventilation for buildings – Ductwork - Requirements for ductwork components to facilitate maintenance of ductwork systems.</i>
prEN 1507	<i>Ventilation for buildings – Ductwork – Rectangular sheet metal air ducts – Requirements for testing Strength and leakage.</i>
prEN 12237	<i>Ventilation for buildings – Ductwork – Strength and leakage of circular sheet metal ducts.</i>

## 3 Terms and definitions

For the purposes of this European Standard the terms and definitions given in CR 12792 apply.

## 4 Function

The principal function of the support/hanger system is to ensure a secure connection to the building that will accept the load imposed by the air distribution system. The support/hanger system shall therefore be designed to ensure a secure support for the ductwork system.

Particular attention shall be given to the support of individual components included in ductwork systems. Ductwork components will generally be in accordance with EN 1505, EN 1506, ENV 12097, prEN 1507 and prEN 12237.

The designer shall also take account of insulation loads, imposed loads (cleaning and maintenance), vibration isolation and corrosion resistance, together with necessary safety factors.

## 5 Support attachment to building structure

The requirements in this standard are specified on the basis that the building has been designed to accept the load imposed by mechanical and air distribution services and systems. The selected method of attachment to the structure shall ensure the following:

- a) compatibility with the building material at the fixing point;
- b) a defined permissible load;