



# SLOVENSKI STANDARD SIST EN 12220:1999

01-september-1999

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Ventilation for buildings - Ductwork - Dimensions of circular flanges for general ventilation

Lüftung von Gebäuden - Luftleitungen - Maße von runden Flanschen für allgemeine Lüftungszwecke

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Réseau de conduits - Brides circulaires pour ventilation générale - Dimensions

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Ta slovenski standard je istoveten z: **EN 12220:1998**

**ICS:**

23.040.60	Prirobnice, oglavki in spojni elementi	Flanges, couplings and joints
91.140.30	Ú!^:  æ^çæ) ã Á ã æ\ã •ã c{ã	Ventilation and air-conditioning

**SIST EN 12220:1999**

**en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

EN 12220

April 1998

ICS 23.040.60; 91.140.30

Descriptors: buildings, ventilation, air conditioning, aeraulic pipes, metal plates, pipe flanges, dimensions

English version

## Ventilation for buildings - Ductwork - Dimensions of circular flanges for general ventilation

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Lüftung von Gebäuden - Luftleitungen - Maße von runden Flanschen für allgemeine Lüftungszwecke

This European Standard was approved by CEN on 13 February 1998.

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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 Central Secretariat 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.

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

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

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ISTITUTO ITALIANO  
STANDARDI  
Via Broletto, 15  
00198 Roma  
Tel. 06 498091  
Fax 06 498092  
www.italianstandards.it

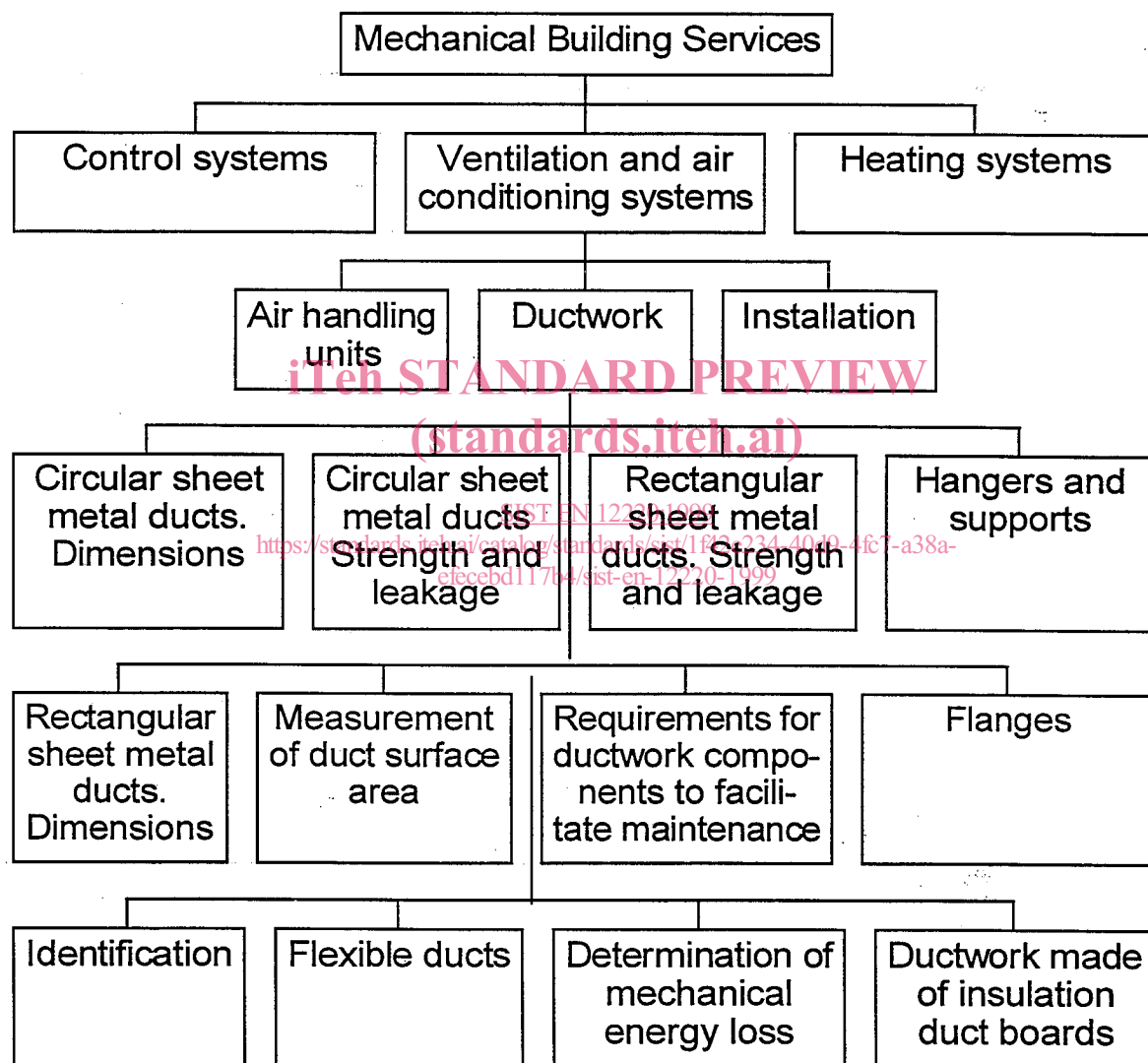


## Foreword

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

This 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 the mechanical building services is shown in figure 1.



**Figure 1 : Position of EN 12220 in the field of mechanical building service.**

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 October 1998, and conflicting national standards shall be withdrawn at the latest by October 1998.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium,

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Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

### **Introduction**

This standard has been prepared by CEN/TC 156 to specify dimensions and tolerances for circular flanges used in ventilation systems.

It should be noted that circular ducts are normally joined without flanges. The purpose of this standard is intended to ensure uniformity of connections between circular ducts and items of equipment, e.g. sound attenuators, filters, etc.

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## 1 Scope

This European Standard specifies dimensional characteristics of circular flanges for sheet metal ductwork. It applies to ductwork used in ventilating and air conditioning systems in buildings, subject to human occupancy.

For flange dimensions of industrial fans see ISO 6580 and ISO 13351.

## 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.

EN 1506 Ventilation for buildings. - Sheet metal air ducts and fittings with circular cross section. - Dimensions.

ISO 6580 General purpose industrial fans - Circular flanges - Dimensions.

ISO 13351 Industrial fans - Dimensions.

CR 12792 Ventilation for buildings - Symbols and terminology.

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## 3 Definitions and symbols

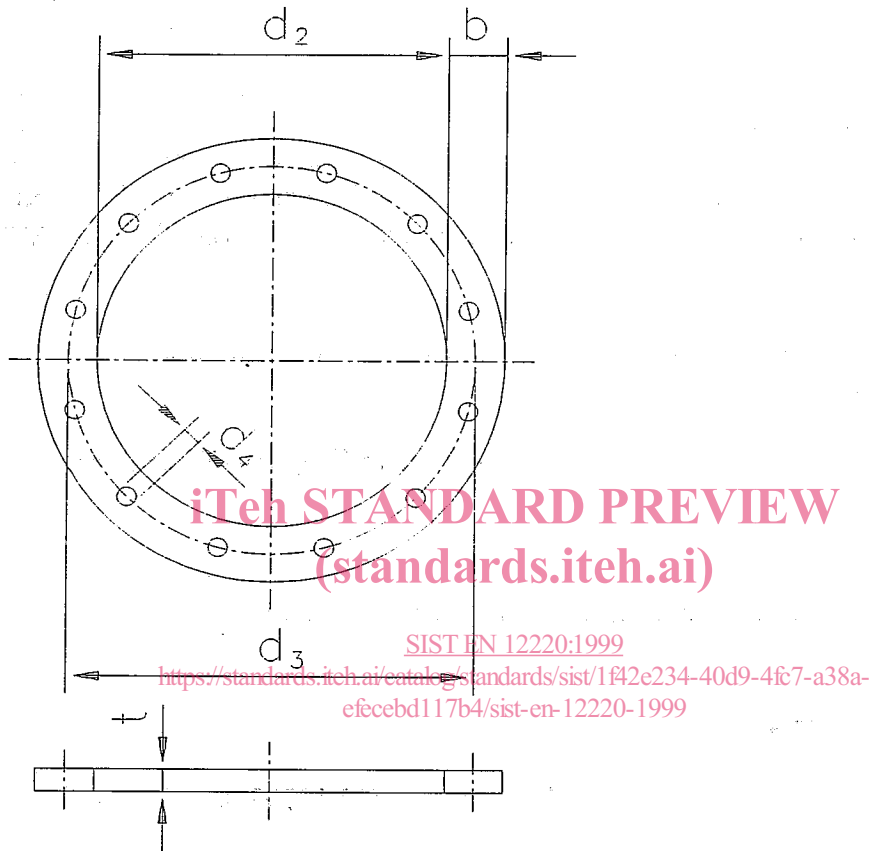
For the purposes of this standard, the definitions given in CR 12792 together with the following apply:

**3.1 nominal diameter d:** The reference dimension in mm used for designation, calculation and application of flanges.

**3.2 deviation :** The difference between the upper or lower limit of the size and the corresponding nominal size.

#### 4 Dimensions

Flange dimensions are shown in figure 2.



NOTE: for  $b$  and  $t$  see table A.1.

**Figure 2 : Circular flange**

The flange construction shown in figure 2 is an example, other constructions are possible.



Table 1 : Circular flanges - dimensions

Nominal diameter d mm	d <sub>2</sub> <sup>1)</sup> mm	Deviations mm	Pitch circle diameter d <sub>3</sub> ± 0,5 mm	Hole diameter d <sub>4</sub> ± 0,5 mm	Number of holes	Bolt
80	82	+1	112	9,5	4	M 8
100	102	0	132			
125	127		157			
150 <sup>2)</sup>	152	+ 1,5 0	182	9,5	6	M 8
160	162		192			
200	203		233			
250	253		283	9,5	8	M 8
300 <sup>2)</sup>	303	+1,5 0	337			
315	318		352			
355 <sup>2)</sup>	358		392			
400	404		438			
450 <sup>2)</sup>	454		488			
500	504			538	9,5	12
560 <sup>2)</sup>	564	+2 0	600			
630	634		670			
710 <sup>2)</sup>	714		750			
800	804		840			
900 <sup>2)</sup>	904		940			
1000	1005			1041	9,5	24
1120 <sup>2)</sup>	1125	+2	1169			
1250	1255	0	1299			

<sup>1)</sup> The inside diameter d<sub>2</sub> of the flanges is based on spiralwound ducts. For other types of ducts the dimension d<sub>2</sub> can be different.

<sup>2)</sup> Additional sizes

NOTE : It is intended that additional sizes, which are used in some countries, should be phased out and may be removed from a future edition of the standard.