International Standard

ISO 7807

Air distribution — Straight circular sheet metal ducts with a lock type spiral seam and straight rectangular sheet metal ducts — Dimensions

Distribution d'air — Conduits droits circulaires en tôle d'acier agrafée en hélice et conduits droits rectangulaires en tôle d'acier — Dimensions

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been authorized has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 7807 was developed by Technical Committee ISO/TC 144, *Air distribution and air diffusion*, and was circulated to the member bodies in May 1982.

It has been approved by the member bodies of the following countries:

Australia	Germany, F.R.	South Africa, Rep. of
Austria	Ireland	Sweden
Egypt, Arab Rep. of	Poland	Switzerland
France	Romania	United Kingdom

The member bodies of the following countries expressed disapproval of the document on technical grounds:

Belgium
Czechoslovakia

Air distribution — Straight circular sheet metal ducts with a lock type spiral seam and straight rectangular sheet metal ducts — Dimensions

1 Scope

This International Standard specifies dimensional characteristics of straight elements of circular and rectangular ducts.

2 Field of application

This international Standard applies to air ducts used in heating, ventilating and air conditioning.

3 Definition

For the purpose of this International Standard, the following definition applies.

nominal dimensions: The internal dimensions of the duct.

4 Circular ducts

See tables 1 and 2.

5 Rectangular ducts

See table 3.

Table 1 — Recommended sizes for circular ducts (R 10 series)

Internal diameter and tolerances [1] mm
$63\ ^{+0,5}_{\ 0}$
$80\ ^{+0,5}_{\ 0}$
$100\ ^{+0,5}_{\ 0}$
$125\ ^{+0,5}_{\ 0}$
$160\ ^{+0,6}_{\ 0}$
$200\ ^{+0,7}_{\ 0}$
$250\ ^{+0,8}_{\ 0}$
$315\ ^{+0,9}_{\ 0}$
$400\ ^{+1}_{\ 0}$
$500\ ^{+1,1}_{\ 0}$
$630\ ^{+1,2}_{\ 0}$
$800\ ^{+1,6}_{\ 0}$
$1\ 000\ ^{+2}_{\ 0}$
$1\ 250\ ^{+2,5}_{\ 0}$

Table 2 — Additional sizes for circular ducts

Internal diameter and tolerances [1] mm
$71\ ^{+0,5}_{\ 0}$
$90\ ^{+0,5}_{\ 0}$
$112\ ^{+0,5}_{\ 0}$
$140\ ^{+0,6}_{\ 0}$
$180\ ^{+0,7}_{\ 0}$
$224\ ^{+0,8}_{\ 0}$
$280\ ^{+0,9}_{\ 0}$
$355\ ^{+1}_{\ 0}$
$450\ ^{+1,1}_{\ 0}$
$560\ ^{+1,2}_{\ 0}$
$710\ ^{+1,6}_{\ 0}$
$900\ ^{+2}_{\ 0}$
$1\ 120\ ^{+2,5}_{\ 0}$

Any diameters of more than 1 250 which may be necessary shall be selected from series R 20.

Table 3 — Recommended sizes for rectangular ducts

Long side $^{0}_{-4}$	Short side $^{0}_{-4}$										
	100	150	200	250	300	400	500	600	800	1 000	1 200
150	X	X									
200	X	X	X								
250	X	X	X	X							
300	X	X	X	X	X						
400	X	X	X	X	X	X					
500		X	X	X	X	X	X				
600		X	X	X	X	X	X	X			
800			X	X	X	X	X	X	X		
1 000				X	X	X	X	X	X	X	
1 200					X	X	X	X	X	X	X
1 400						X	X	X	X	X	X
1 600						X	X	X	X	X	X
1 800							X	X	X	X	X
2 000							X	X	X	X	X

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1) The tolerance indicated is a tolerance on the mean internal diameter.