



ISODEC INSULATED DUCT

5.15

AIS



Construction

The duct is made up of a aluminium/polyester film laminated core, incorporating a coated mechanical spring wire helix and solvent based adhesive. The duct is constructed in a way that allows it to maintain its full diameter throughout bends. When correctly installed, it offers low resistance to air flow. The glasswool insulation surrounding the duct core is encapsulated in a UV resistant and heat stabilised polyethylene sleeve or, in the case of the fire rated version, a aluminium/polyester laminated sleeve.

Insulation

The insulation is 40mm glasswool blanket with a nominal R value of 1.0m² K/W.

Application

Isodec has been designed for high and low pressure heating, ventilation and cooling. It is supplied in standard diameters from 127mm through 250mm in 25mm increments, and from 250mm through 500mm in 50mm increments. Lengths of 3m and 6m up to and including 400mm dia. The 450mm and 500mm dia. is available in 3m lengths only.

Ordering Procedure

Using the chart below, select your requirements and substitute the underscored text below.

AIS..L..R.. 40..D..A

Example: If your requirement is for a 8" (203mm) dia. fire rated, plain core duct, 6m long, the ordering code would be: **AIS..6..F..40..08..P** (When ordering it is not necessary to include the periods (..)).

Type	Length (m) "L"		Rating "R"		Diameter (inch) "D"	Noise Attenuation "A"	
	3m	6m	Standard	Fire Rated	Inch (mm)	Acoustic	Plain
AIS	3	6	S	F	05 (127)	A	P
"	3	6	S	F	06 (152)	A	P
"	3	6	S	F	07 (178)	A	P
"	3	6	S	F	08 (203)	A	P
"	3	6	S	F	09 (228)	A	P
"	3	6	S	F	10 (254)	A	P
"	3	6	S	F	12 (304)	A	P
"	3	6	S	F	14 (355)	A	P
"	3	6	S	F	16 (406)	A	P
"	3	6	S	F	18 (457)	A	P
"	3	-	S	F	20 (508)	A	P

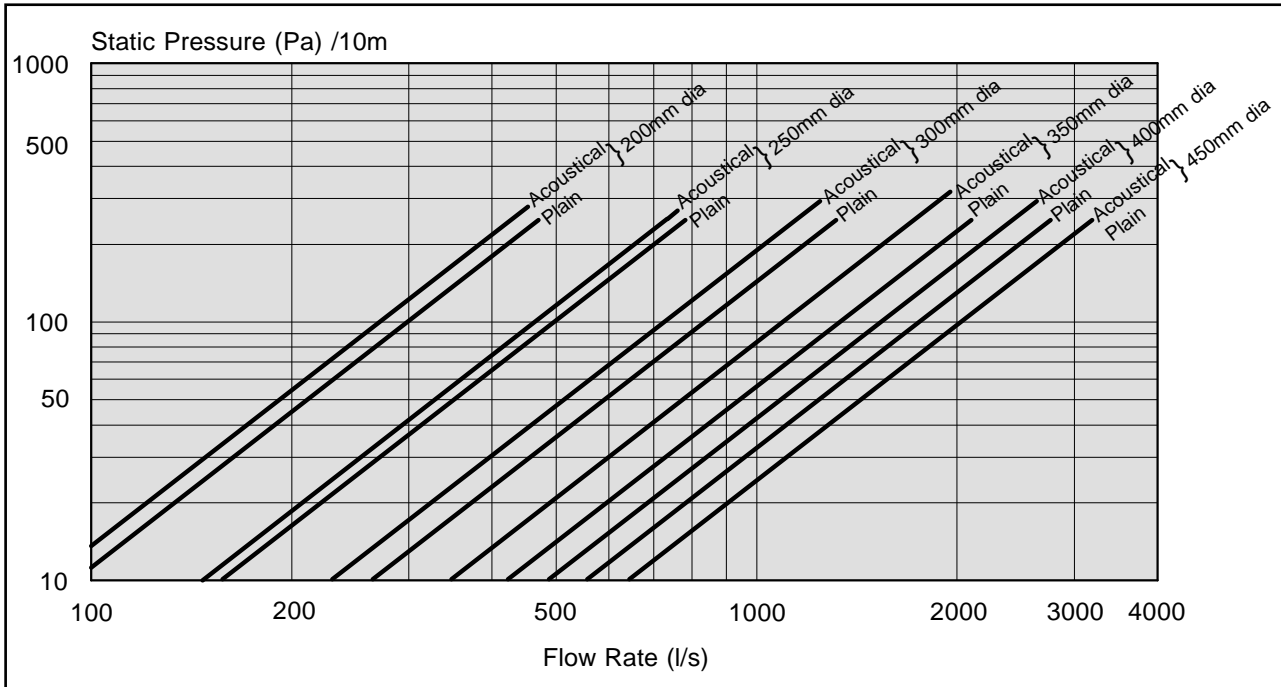
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Performance data



These graphs are for selection only and should not be used for commissioning

Ratings

Maximum Air velocity:

30m/s plain core
15m/s acoustic core

Airflow temperature:

range -20°C to 1200°C
(External temperature should not exceed 80°C)

Maximum Working Pressure:

2500 Pa (plain core)
750 Pa (acoustic core)
(When installed to Bradflo installation instructions.)

Fire Hazard Performance

Isodec Fire Rated duct achieves a zero for all indices when tested to AS1530.3 in accordance with AS/NZS 1668.1 - 1998

Isodec also meets the requirements of AS4254 - 1995 and amendments when tested to AS 1530.3 and UL181

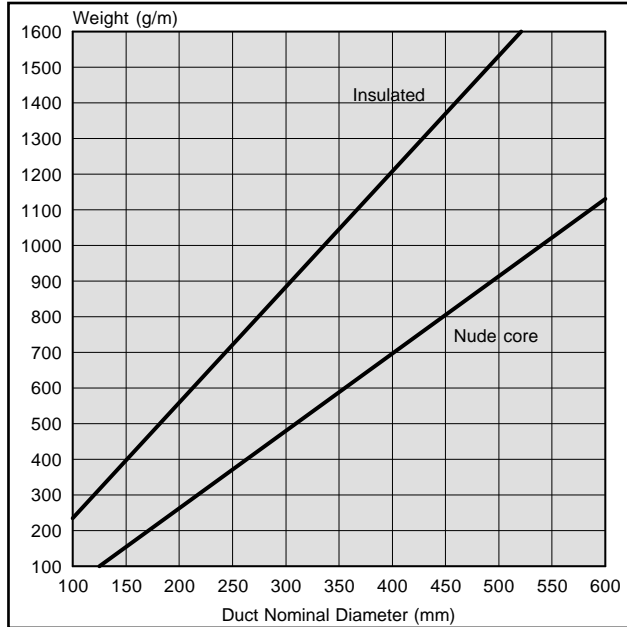


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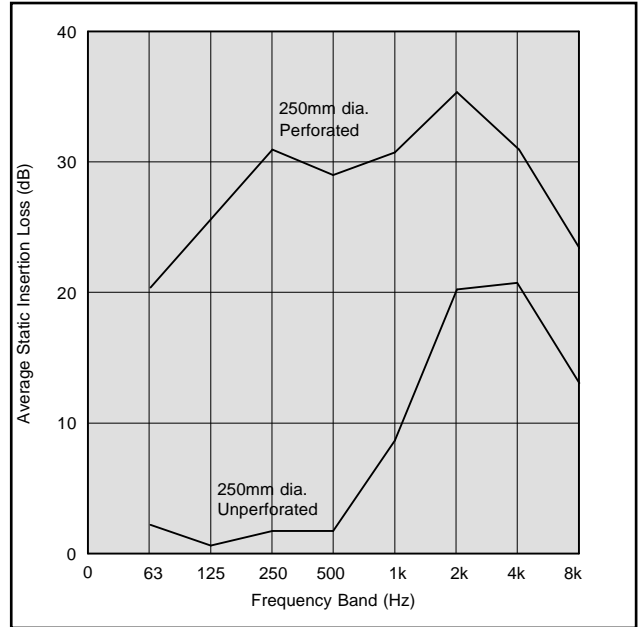
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Weight of duct



Acoustic properties



Isodec duct has sound attenuation properties. The sound attenuation shown in the graph above has been based on NATA test, report No. 943-87