



SONODEC NON-WOVEN

ACOUSTICALLY AND THERMAL INSULATED DUCTING

The **SONODEC NON-WOVEN** consists of a Polypropylene fabric cloth inner duct, thermally and acoustically insulated with a glasswool layer and provided with an aluminium laminated outer jacket. The inner duct is hydrophobic.

APPLICATION

- Air-conditioning systems
- Air supply systems
- Preventing condensation in air ventilation systems
- Decreasing of machine noises

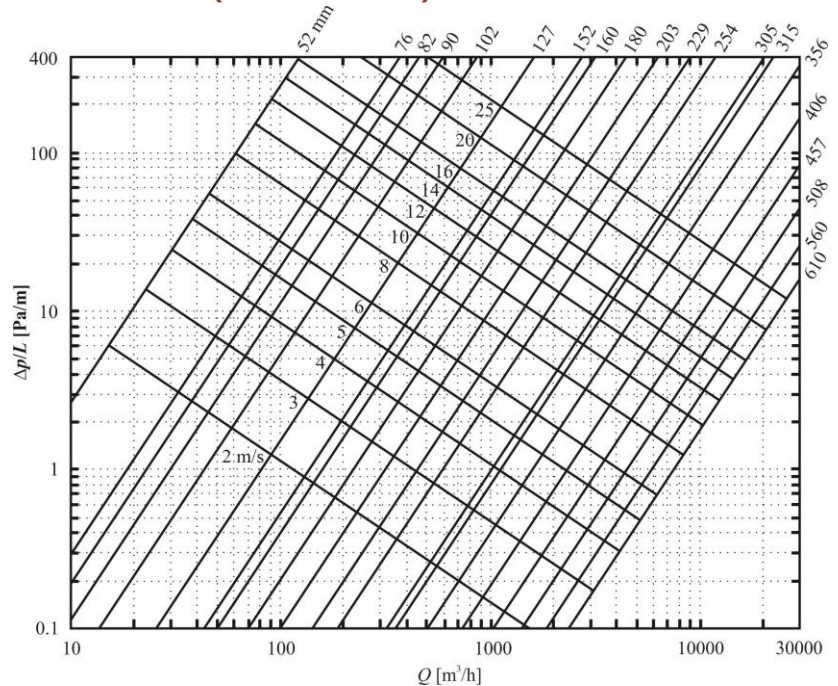
SPECIFICATIONS

Article code:	SBI{Ø}
Temperature range:	-30 °C to 140 °C
Operating pressure:	up to +2500 Pa
Operating air velocity:	max. 25 m/s
Min. bending radius:	0.54 x Ø + 25mm
Standard diameter range:	82 – 315 mm
Standard length:	10 mtr

CONSTRUCTION

Inner duct:	Non-woven Polypropylene fabric cloth
Glass wool blanket:	25mm, 16kg/m ³
Outer jacket:	alu/poly laminate
R-value glass wool:	0.65 m ² K/W (ASTM C177-76)
Appearance:	aluminium

PRESSURE LOSS (STRAIGHT DUCT)



The **SONODEC NON-WOVEN** fulfills all the requirements and are classified as specified within EN 13180: Ventilation for buildings – Ductwork - Dimensions and mechanical requirements for flexible ducts.

The **SONODEC NON-WOVEN** is also available, on request, with a 50 mm glass wool layer, the article number is: SBI50{Ø}
R-value glass wool: 1.3 (50 mm) m² K/W (ASTM C177-76).

Reach/RoHs Compliant

Directive 2011/65/EU RoHS

Phthalates according to 1907/2006/EC REACH

Test result: Pass - The test items meets the requirements of the test specification



LIABILITY:

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PLEASE NOTICE:

The consultant is responsible for the actual installation and mounting of the product. The mentioned values with respect to temperatures are not appropriate to be used to determine the physical properties. These properties are also dependent on humidity and the temperature of the air inside and outside of the H.V.A.C. system.

TRADEMARKS:

SONODEC, the DEC logo and DEC International are trademarks, or registered trademarks of Dutch Environment Corporation BV in the Netherlands and/or other countries.

RESTRICTIONS:

The SONODEC ducts are not suitable for discharging combustion products from open fireplaces and oil-fired boilers. Neither are the SONODEC ducts suitable for transporting air with a high concentration of acid and base.





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ACOUSTICALLY AND THERMAL INSULATED DUCTING

SOUND ATTENUATION

According to: **ISO 7235**

Non-woven ins. 25mm (Test report nr. A1672-1 Peutz bv - The Netherlands)										
D_n (mm)	L (m)	Sound Attenuation, dB - Mid-frequency, Hz								D_i (dB)
		63	125	250	500	1000	2000	4000	8000	
080	1.0	13.6	22.4	40.2	38.7	36.5	41.3	51.6	45.8	39
100	1.0	15.9	22.9	31.1	38.6	36.4	40.6	50.1	35.9	39
125	1.0	11.7	18.9	32.4	29.9	28.8	34.5	40.9	24.5	32
150	1.0	12.2	10.9	29.7	30.1	29.0	38.3	34.6	20.4	32
160	1.0	19.3	25.4	30.5	27.1	23.8	32.2	27.8	17.3	28
180	1.0	17.3	13.6	27.6	26.5	26.0	35.1	22.7	13.2	-
200	1.0	10.7	12.1	28.7	22.8	22.8	30.6	19.4	11.9	26
250	1.0	12.9	18.7	24.3	19.5	19.9	27.7	12.9	10.2	22
315	1.0	16.6	23.2	18	15.2	16.5	19.6	10.1	8.5	17
Non-woven ins. 50mm										
100	1.0	4.3	8.5	15.5	28.2	50.8	51	57.8	38.5	30
125	1.0	17.7	26.3	35.4	29.2	33.3	45.4	40.5	26.5	35
160	1.0	16.5	24.1	30.6	27.5	29.6	41.7	28.7	18.1	32
180	1.0	17.3	28.5	28.9	25.1	30.7	38.3	22.7	18.3	-
200	1.0	6.5	6.3	21.1	27.1	30.5	35.8	19.4	12.3	29
250	1.0	9.0	10.0	22.0	24.0	28.0	28.0	13.0	9.0	-
315	1.0	12.4	14.0	23.7	21.5	25.7	16.0	6.9	5.9	-
Non-woven ins. 25mm 3Mtr										
180	3.0	15.3	29.0	36.8	32.6	32.7	40.8	43.4	35.2	-
200	3.0	17.3	30.7	36.8	32.7	34.5	40.3	40.8	22.8	37
250	3.0	22.4	30.7	33.5	31.0	32.0	38.9	26	16.2	35
315	3.0	31.7	32.5	29.1	25.2	28.2	37.3	16.6	14.6	30

D_i = Average attenuation

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WALL REDUCTION According: **ISO 7235**

Non-woven ins. 25mm (Test report nr. A1672-1 Peutz bv - The Netherlands)										
D_n (mm)	L (m)	Wall reduction, dB - Mid-frequency, Hz								D_i (dB)
		63	125	250	500	1000	2000	4000	8000	
080	1.0	29.7	24.6	20.4	14.1	12.1	14.7	16.8	21.6	14
100	1.0	28.9	24.0	19.4	14.8	13.7	15.2	18.6	22.9	15
125	1.0	24.6	21.2	16.4	12	11.9	13.6	15.9	20.1	13
150	1.0	25.4	21.6	17.1	13.3	11.3	13.2	15.0	17.3	13
160	1.0	23.5	19.0	13.8	10.2	9.5	10.4	13.1	16.2	28
180	1.0	23.9	19.6	13.5	10.0	9.2	10.1	13.8	19.2	-
200	1.0	22.4	19.1	14.0	9.8	9.0	9.1	11.8	15.1	26
250	1.0	22.6	16.2	11.5	10.1	9.1	9.9	12.4	15.7	22
315	1.0	19.6	13.4	9.3	8.1	7.8	8.7	11.6	14.7	17
Non-woven ins. 50mm										
100	1.0	34.1	34.0	28.4	21.1	19.1	19.9	23.4	26.7	20
125	1.0	25.3	21.8	17.9	15.0	15.7	19.1	21.3	24.7	17
160	1.0	24.7	19.6	14.2	11.1	13.0	15.4	19.3	20.9	14
180	1.0	20.8	18.5	13.7	11.4	11.9	13.9	17.5	21.6	-
200	1.0	26.1	21.5	15.2	11.7	11.8	13.5	17.5	19.8	13
250	1.0									-
315	1.0	19.9	15.9	12.6	11.6	11.3	13.6	17.7	22.6	-
Non-woven ins. 25mm 3Mtr										
180	3.0	22.1	18.8	14.3	12.6	11.4	11.8	12.8	16.6	-
200	3.0	21.4	18.7	13.6	10.4	9.7	9.7	12.1	15.0	37
250	3.0	21.7	16.1	11.3	10.6	10.1	10.2	13.2	16.3	35
315	3.0	19.3	12.4	9.4	8.3	8.6	9.6	12.1	14.6	30
Di = Average attenuation										

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