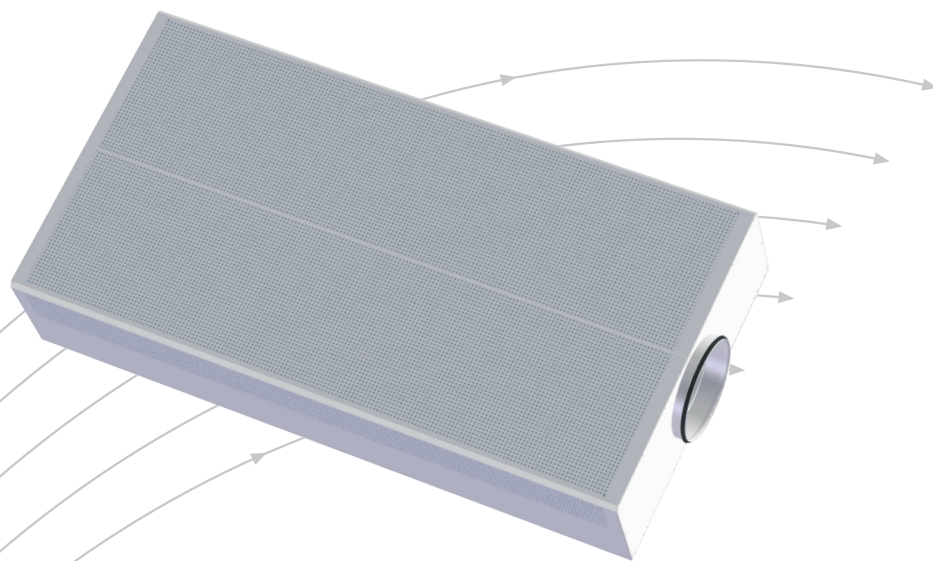


Siv-inn 2

Diffuser for displacement
ventilation in industrial buildings



- Even air distribution
- Large capacity
- Rectangular and circular design

TROX[®] TECHNIK

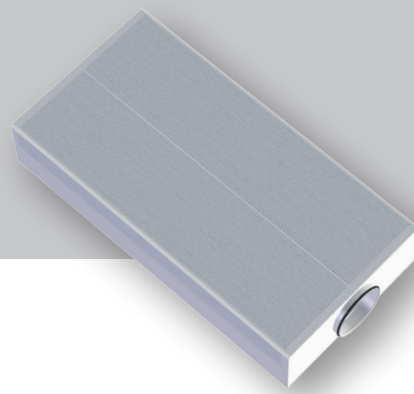
 **Auranor**

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Siv-inn 2



APPLICATION

Siv-inn 2 is designed for displacement ventilation in industrial buildings.

DESIGN

Comes with a top-entry spigot, and is available in a rectangular as well as a 1/4, 1/2 and 1/1 curved design.

MATERIALS AND SURFACE COATING

All parts are in a steel design. The unit is delivered in a galvanized steel finish as standard, but is also available in special material and/or in an painted finish.

QUICK SELECTION, Siv-inn 2. 1/4R, 1/2R og 1/1R

H = 1500 and H = 2000

Siv-inn 2	[m ³ /h]		
Dim.	35 dB(A)	40 dB(A)	45 dB(A)
315	1370	1550	2000
400	2000	2450	3000
500	3100	4000	4700
630	4700	5700	6500
800	5800	6800	8300

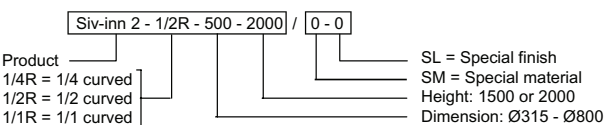
Table 1: The table shows air flow rates at given sound power levels.

QUICK SELECTION, Siv-inn 2. Rectangular

Siv-inn 2	[m ³ /h]		
Type	35 dB(A)	40 dB(A)	45 dB(A)
128	540	630	810
206	828	954	1152
2010	1278	1584	1980
2012	1602	1980	2340

Table 2: The table shows air flow rates at given sound power levels.

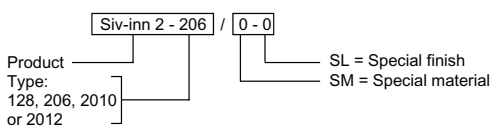
ORDER CODE, Siv-inn 2. 1/4R, 1/2R and 1/1R



Example:
Siv-inn 2-1/2R-500-2000 / 0-0

Explanation:
Siv-inn 2-1/2 curved, dimension Ø500 and height 2000

ORDER CODE, Siv-inn 2. Rectangular



Example:
Siv-inn 2-206 / 0-0

Explanation:
Siv-Inn 2 type 206

DIMENSIONS AND WEIGHT, Siv-inn 2

Dim.	A	B	C	D	E	Weight [kg]	Weight [kg]
				*1/2R	*1/1R		
315	485	500	235	314	400	28 / 37	21 / 27
400	605	630	290	399	500	35 / 45	27 / 35
500	760	800	360	499	630	44 / 56	33 / 42
630	970	1000	470	629	800	59 / 75	43 / 55
800	1220	1200	620	799	1000	83 / 103	55 / 70

Table 3: Siv-inn 2. 1/2R and 1/1R
(*for H=1500 and H=2000 respectively).

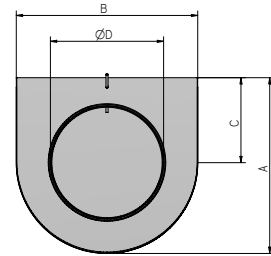
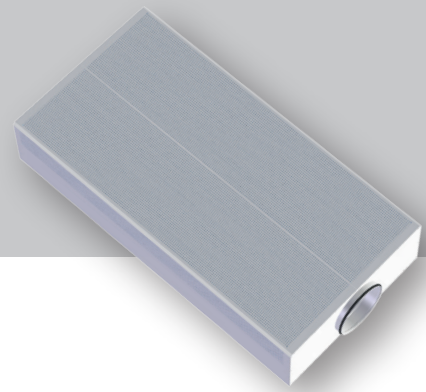
Dim.	A	B	D	*Weight [kg]
315	713	321	314	38 / 48
400	840	371	399	44 / 57
500	1120	502	499	61 / 77
630	1377	656	629	77 / 97
800	1782	835	799	107 / 132

Table 4: Siv-inn 2. 1/4R (*for H=1500 and H=2000 respectively).

Type	B	C	E	H	D	Weight [kg]
128	600	270	145	1200	199	21
206	600	330	180	1980	249	42
2010	995	380	192	1980	314	48
2012	1190	460	232	1980	399	56

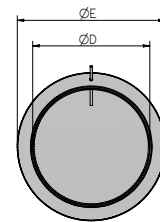
Table 5: Siv-inn 2. Rectangular

Siv-inn 2



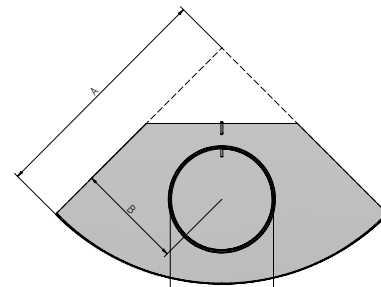
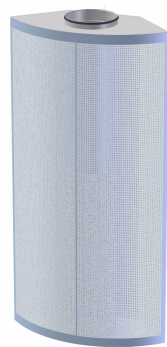
H = height = 1500 mm or 2000 mm

Fig. 1, Siv-inn 2. 1/2R



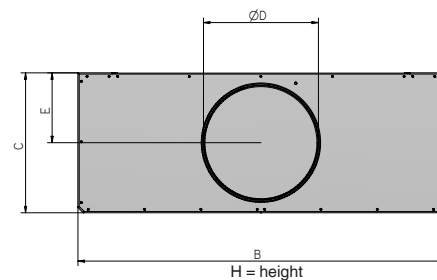
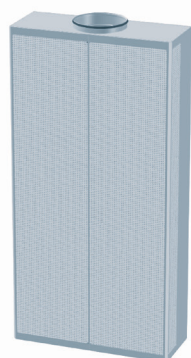
H = height = 1500 mm or 2000 mm

Fig. 2, Siv-inn 2. 1/1R



H = height = 1500 mm or 2000 mm

Fig. 3, Siv-inn 2. 1/4R



H = height

Fig. 4, Siv-inn 2. Rectangular.

Siv-inn 2

ACOUSTIC DATA

The diagram provides a summary of the A-weighted sound power level from diffuser, L_{WA} . Correction factors in table 6 are used to calculate emitted sound power level at the respective frequencies, $L_W = L_{WA} + KO$. A room with absorption equivalent to 10m² Sabine will have a sound pressure level which is 4 dB below the sound power level emitted.

Example:

A production area requires an air flow rate of 1000 l/s, and for this purpose a Siv-inn 2, Ø500 is used. Room attenuation is 9 dB. From the diagram, we find that $L_{WA} = 39$ dB(A) and the total pressure loss is 25 Pa.

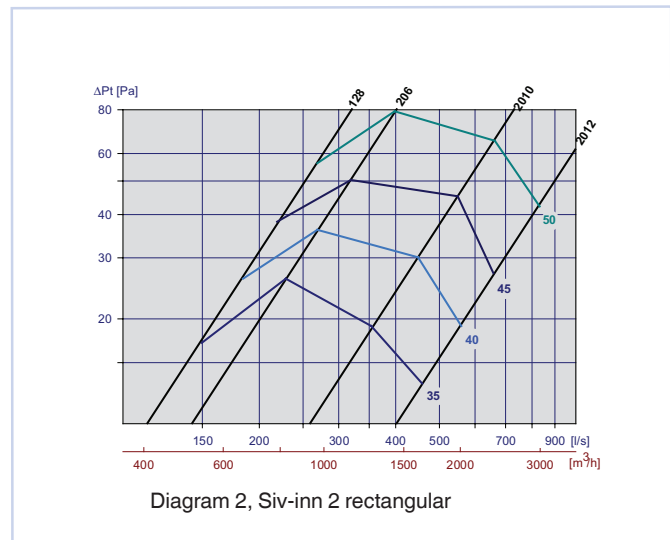
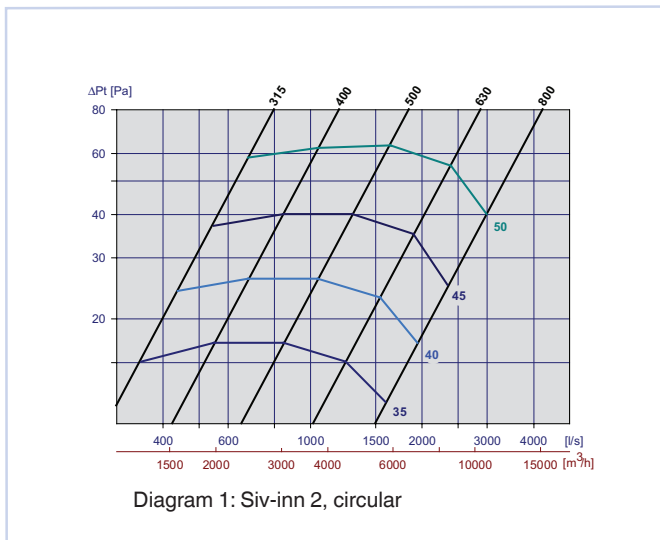
We aim to find:

- Emitted sound power level from the diffuser at 250 Hz.
- A-weighted sound pressure level in the room.

a) According to table 5, the correction factor for 250 Hz is -5 dB. L_W at 250 Hz is thus: $L_{WA} + KO = 39 + (-5) = 34$ dB

b) A room attenuation equivalent to 9 dB provides a sound pressure level in the room of: $39 - 9 = 30$ dB(A)

CALCULATION DIAGRAMS



Correction factor [KO], Siv-inn 2

Siv-inn 2 Dim.	KO[dB]							
	63	125	250	500	1k	2k	4k	8k
315	-5	-4	-3	-5	-7	-13	-23	-20
400	-5	-5	-5	-6	-5	-12	-21	-20
500	-4	-3	-5	-4	-5	-12	-21	-20
630	-2	-2	-4	-5	-6	-13	-19	-18
800	-5	-5	-5	-5	-4	-5	-1	-10

Table 6

Siv-inn 2

INSTALLATION

Siv-inn 2 is fitted to a connecting duct, and can be left free-standing or mounted to a wall.

COMMISSIONING

The unit comes equipped with measuring tube for air flow measurement. Correction factors for calculation of air flow rates are provided on the label inside the diffuser, or can be found in our commissioning guide at our website: www.trox.no.

MAINTENANCE

The diffuser can be cleaned by using a damp cloth.

ENVIRONMENT

Enquiries regarding product declaration can be directed to our sales team, or information can be found at our website: www.trox.no

Siv-inn 2 is developed and manufactured by:

TROX[®] TECHNIK
 **Auranor**

The company reserves the right to make amendments without prior notice.

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