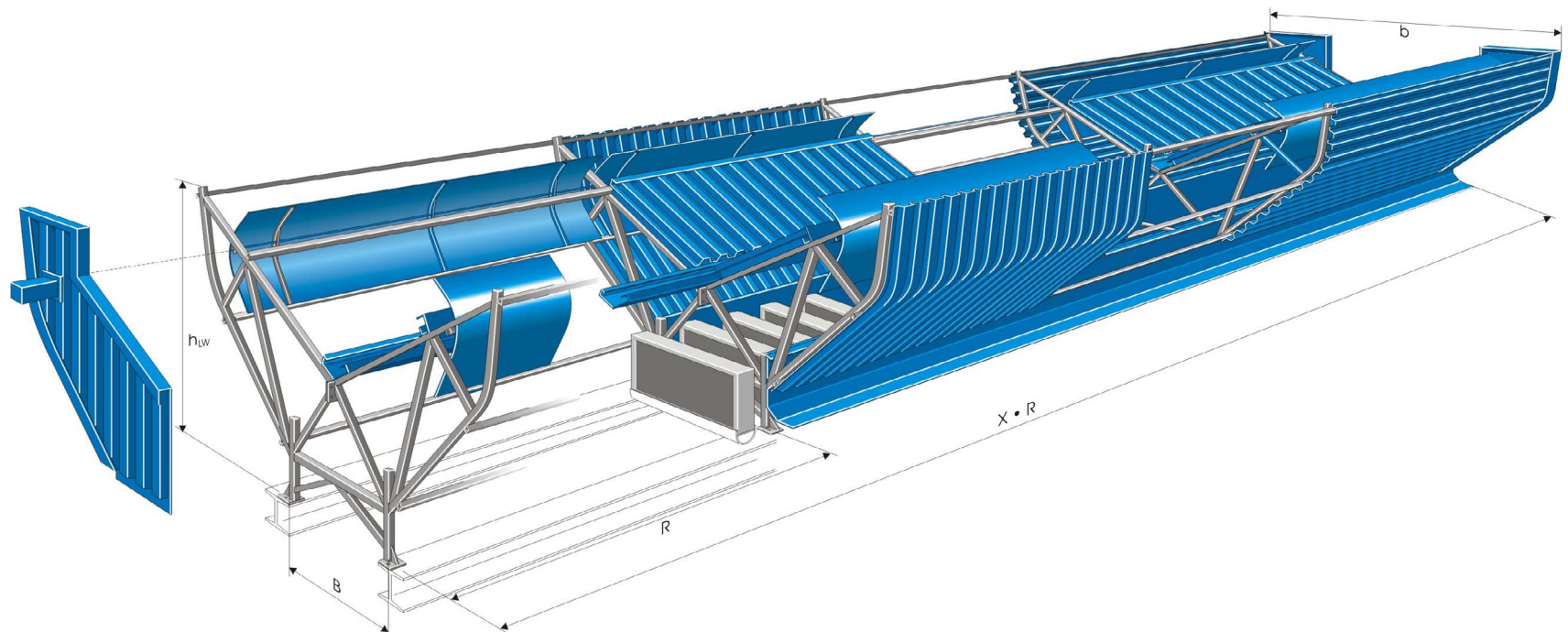


Sound Attenuated High-Performance Gravity Roof Ventilator Series RIF-SD

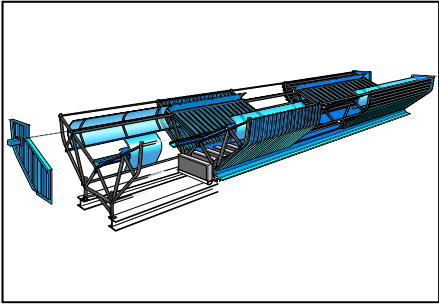


Overview

High-performance gravity roof ventilator for medium to high specific heat loads with advanced sound insulation. Optionally available with integrated smoke/heat extraction function as per DIN and VDS (certified).



Sound Attenuated High-Performance Gravity Roof Ventilator Series RIF-SD



Product Description

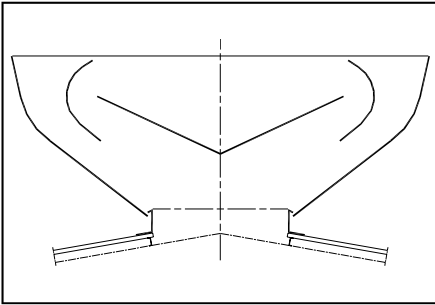
Series RIF-SD - the cost-effective solution for industrial ventilation and noise control

This sound attenuated gravity roof ventilator is based on the configuration of the basic Series RIF. These ventilators are used for applications with high noise reduction requirements in buildings with high specific heat loads or extensive heat sources. The ventilator shaft and the flow guide roof are cladded with non-combustible sound absorbing slabs.

The Series RIF-SD sound attenuated natural ventilators are subjected to large-scale noise tests in an echo chamber. These tests and measurements are essential to precisely ascertain and guarantee noise reduction properties for frequencies within audition limits. Natural ventilators in the Series RIF-SD can deliver a sound insulation factor of up to $R'w = 35$ dB and a C_{vo} value of up to 0.62.

These ventilators offer an optimum combination of high coefficient of discharge C_{vo} and maximum noise reduction efficiency.

Sound Attenuated High-Performance Gravity Roof Ventilator Series RIF-SD

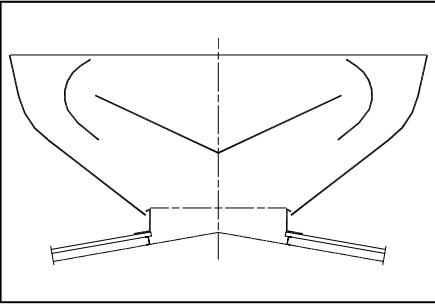


Dimensions and Weight Technical Data

Type	B (mm)	b (mm)	h _{LW} (mm)	R (mm)	R _w (dB) DIN 52210, Part 4	C _{v0} DIN 18232	Weight (Kg/m) Frames Aluminium Cladding Aluminium	Weight (Kg/m) Frames Steel Cladding Aluminium	Weight (Kg/m) Frames Steel Cladding Steel
1000	1000	3040	1500	max. 4500	max 35 dB	see diagram	30 + silencer	58 + silencer	75 + silencer
1500	1500	4560	2200	max. 4500	max 35 dB	see diagram	43 + silencer	86 + silencer	112 + silencer
2000	2000	6080	2900	max. 4500	max 35 dB	see diagram	60 + silencer	114 + silencer	148 + silencer
2500	2500	7600	3600	max. 4500	max 35 dB	see diagram	N/A	186 + silencer	242 + silencer
3000	3000	9120	4300	max. 4500	max 35 dB	see diagram	N/A	276 + silencer	358 + silencer

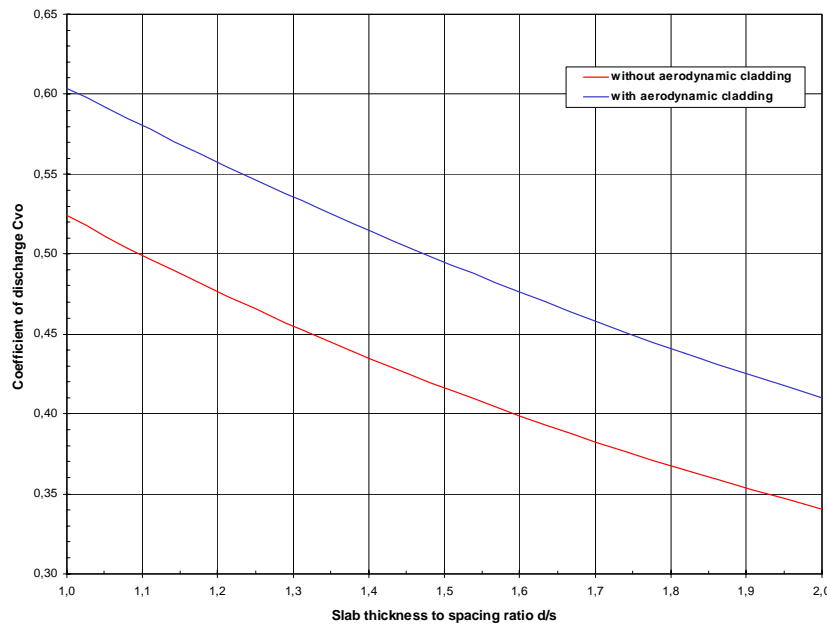
Technical data for throat sizes above 3000 mm on request.

Sound Attenuated High-Performance Gravity Roof Ventilator Series RIF-SD

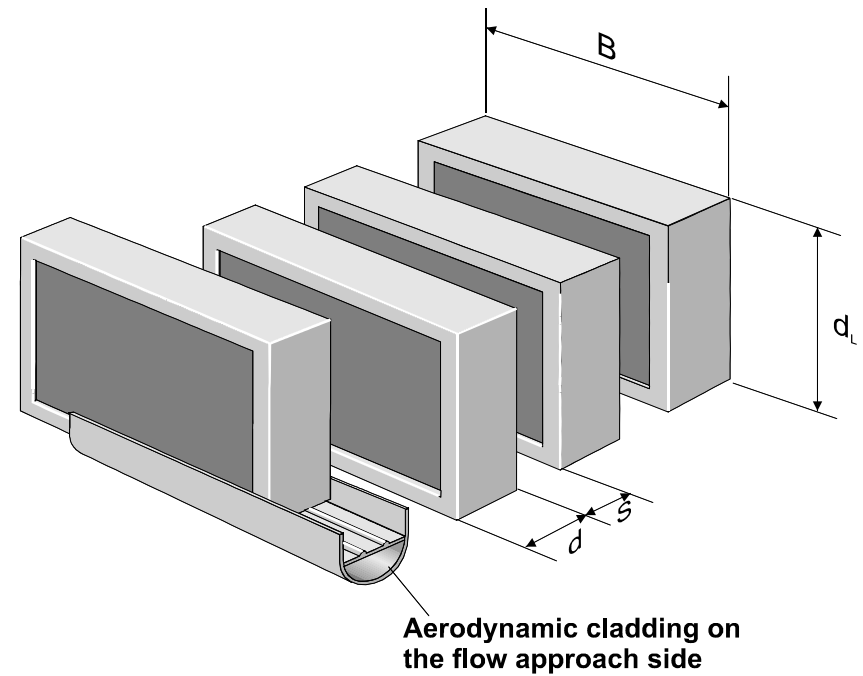


Coefficient of Discharge

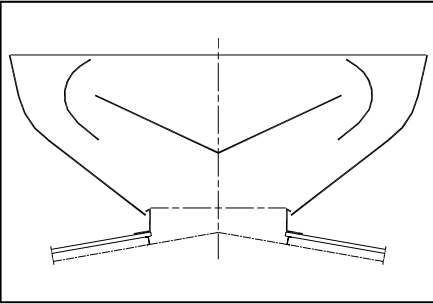
Coefficient of discharge for sound attenuated gravity roof ventilator Series RIF



d = Slab thickness
 S = Slab spacing
 d_L = Slab length



Sound Attenuated High-Performance Gravity Roof Ventilator Series RIF-SD



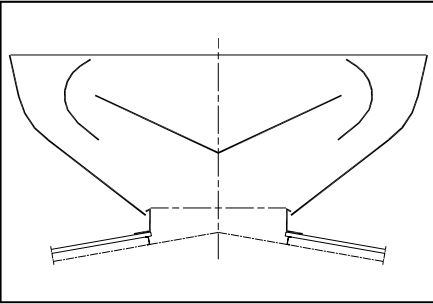
Material Specification Options

Material of cladding			Material of frame structure					
Galvanized steel sheet, coated	Aluminium, uncoated or coated	Plastic	Aluminium hollow sections		Steel			
			Uncoated	Coated	Hollow sections		Rolled sections	
					Galvanized	Galvanized and coated	Galvanized	Galvanized and coated
X	X	X	X	X	X	X	X	X

Operation of dampers				Options							
Manual		Pneumatic	Electric	Transparent roof	Trapezoidal sheets		Certified smoke extraction function	Bird screen	Pressure relief function for potentially explosive applications	Sealings	Ladder
Hand lever	Teleflex				Horizontal	Corrugated					
X	X	X	X	N/A	X	X	X	X	N/A	X	X

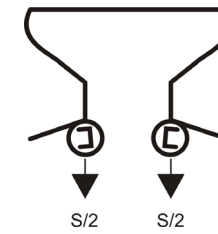
Specification of the coating system according to customer request and required corrosion protection.

Sound Attenuated High-Performance Gravity Roof Ventilator Series RIF-SD

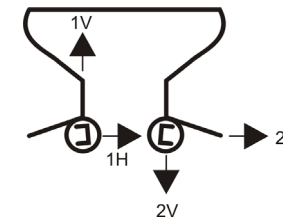


Wind and Snow Loads

Type	Snow loads S [kN] ($S_0 = 0.75 \text{ kN/m}^2$)
1000	3.09
1500	4.39
2000	5.68
2500	6.94
3000	8.21



Type	Wind loads for buildings up to 100m height [kN]			
	1V	1H	2V	2H
1000	-10.21	-2.83	6.62	-3.11
1500	-15.32	-4.24	9.93	-4.66
2000	-20.42	-5.65	13.24	-6.21
2500	-25.53	-7.06	16.55	-7.76
3000	-30.63	-8.48	19.86	-9.32



Loads for buildings >100 m on request.