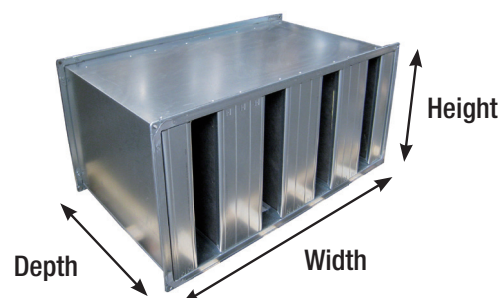


RECTANGULAR SILENCERS

SONIE R-BS / R-BD / R-BL / R-BME / R-BP R-BS+ / R-BD+ / R-BME+ / R-BP+

Acoustic silencer or rectangular sound attenuators (sound trap)

Composed of a rectangular casing and acoustic splitters, the rectangular sound attenuators are offered in standard in four different thicknesses of metal sheet according to the dimensional features and using characteristics. The type of splitters is determined according to the acoustic performances objective and application.



According to the application, the silencer can be equipped with:

	Regular version	High Performance version
Standard splitters	SONIE R-BS	SONIE R-BS+
Smoke exhaust 400°C/2h splitters	SONIE R-BD	SONIE R-BD+
Splitters for clean rooms	SONIE R-BL	
Splitters for high air velocity	SONIE R-BP	SONIE R-BP+
Splitters with external membrane	SONIE R-BME	SONIE R-BME+
Splitters with internal membrane	SONIE R-BMI	SONIE R-BMI+

CONSTRUCTION

		Characteristics	Options
Casing	Section	Mini : 200 mm x 200 mm Maxi : 1800 mm x 1800 mm	Higher section on request
	Material	Galvanized steel type Z275	Stainless steel, aluminium, electro-galvanized steel
	Steel thickness	0,8 mm - 1,0 mm - 1,2 mm - 1,5 mm	Other thickness on request
	Assembly	Stapling	Welding
	Connection	Shaping of a framework 20 or 30 mm type METU, plotted angles, fixed by riveting and drilled at Ø13 mm Supply of connection clips	Plotted frames
	Reinforcement	Stiffening by reversed folds to a pitch 160 mm with 1 angle of 3° for big dimensions	Reinforcement for big heights Construction in several parts for big lengths
	Air tightness	See § Performances	Reinforcement by mastic in the staples
	Drilling	Ø 13 mm, & holes in each angle	Other on request
Splitters	Assembly	By rivets at each ends and intermediary rivets each meters	By rails By rivet
	Others	See technical datasheet of: SONIE BS - SONIE BD - SONIE BL - SONIE BS+ - SONIE BD+ ...	

RECTANGULAR SILENCERS

SONIE R-BS / R-BD / R-BL / R-BMI / R-BME / R-BP R-BS+ / R-BD+ / R-BP+ / R-BME+

CONSTRUCTION RULES

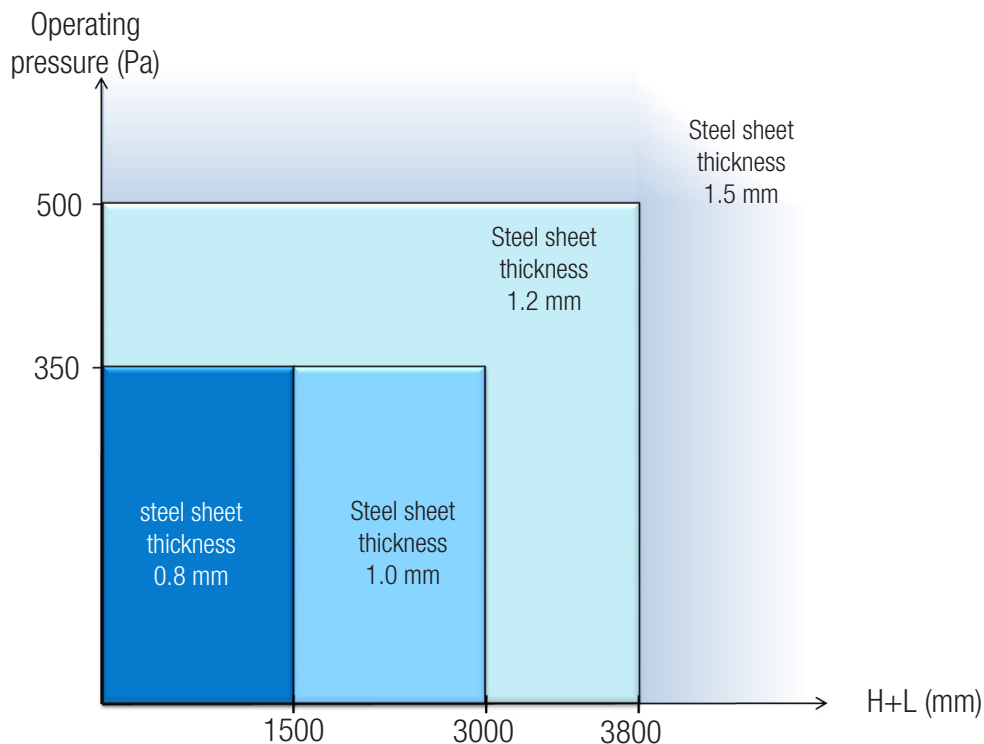
When the thickness of the casing is 1,5 mm, the frames are in folded edges of 30 + 10 mm with plotted angles.

When the depth of the casing is higher than 2400 mm, the splitters of the casing are built in two parts plotted by an assembling piece (The production of several parts can be adapted too for dimensional constraints).

Splitter are fixed by rivets at each end (1/2/3 rivets according to the thickness of the splitter 100/200/300). One more rivet each meter is installed.

RECOMMANDATIONS

Summary of the recommended metal sheet thickness according to the operating pressure in the network (Psr) and to the semi-perimeter (H+L) :



PERFORMANCE

Acoustic : see technical data sheet Acoustic splitters (FT 1.1)

Leakage rate : A comparative table on the rectangular ducts – according to IOWA procedure and with plotted frameworks.