

THE
**ACOUSTIC
ENCLOSURES**

Unit 19, The Firs
Watermill Ind. Est.
Buntingford,
Hertfordshire.
SG9 9JS

CO.LTD

01787 269934

9th March 2024

CustomerZack-Eyes.

Contact.....Jonathan Cohen.

Dear Mr Cohen.

Please find below the details of the enclosure materials which would be used.

I have also detailed below the calculation sheet on how the enclosure would meet the specified reduction.

Specification:

The enclosure was made throughout using folded and fabricated 50mm panels made from 1.5mm zinc coated sheet steel powder coated to the required colour.

The infill for the panels was RWA45 mineral wool faced with a glass tissue and a perforated retainer.

The enclosure was designed with an end mounted access door for maintenance.

The noise calculations are as follows:-

Zack Eyes		Air Volume 3250cfm									
		Target.....36dB at NSR									
Erequencey		63	125	250	500	1k	2k	4k	8k		
RXYSQ6		51	53	52	54	46	41	34	27		
Reflections		3	3	3	3	3	3	3	3		
A weighting		-26	-16	-9	-3	0	1	1	-1		
		28	40	46	54	49	45	38	29		
Distance	decay 20log(r)	-9	-9	-9	-9	-9	-9	-9	-9		
		19	31	37	45	40	36	29	20		
Acoustic Louvres		-7	-8	-16	-18	-26	-29	-24	-23		
Result after treatment		12	23	21	27	14	7	5	-3		
			23		28		15		6		
				29				16			
Single figure representation						29dB(A)					

Please note I found an error on the drawing which I have now corrected and reissued with this email.

- 1) Size of enclosure 1600mm wide x 1160 deep x 1050mm high.
- 2) Platform needs to have minimum 600mm extra both ends and front. The back can be level.
- 3) Regarding costs, we are at our limit, in fact we have under costed this considering the degree of difficulty we can expect assembling on the platform.

I hope the above meets your requirements.

Yours sincerely,

Jim Shaw. C.Eng. MIMech.E. MIOA.