# CHARACTERISTICS OF ECKEL ACOUSTIC PANELS

## TYPICAL CONSTRUCTION

Enclosure wall and roof panel construction is 16 ga. steel outer skin and welded internal framing members on 24" (610 mm) centers. The inner skin is 22 ga. perforated steel (approximately 23% open area). The panels are filled with a minimum of 3 lbs/ft<sup>3</sup> (48 kg/m<sup>3</sup>) acoustical absorbant infill which is inert, mildew & vermin resistant. The panels may be CRS steel, galvanized steel, prime and/or finished painted. Contact your local dealer or the factory for choice of standard colours and options.

Other types of panel construction are available, using various materials for more specialized and custom applications. Consult our individual product brochure, your local dealer or the factory for details.

TYPE 1. CL—Series, H & C—Batten For use in areas with relatively loud mid frequency noise.
Standard four inch
panel with 16 gauge
outer surface. 22 gauge perforated inner surface wit inner surface with four inch acoustical



TYPE 2. C—Series
G—SERIES, HD & CD—Batten
For use in oreas
requiring higher noise
reduction. Some reduction. construction as type 1 with addition of gypsum board barrier.

TYPE 3. XHD—Batten

For use in areas with extremely high noise levels or when low frequency noise is a problem. Same basic problem. Same bas construction as type & 2 panels with th addition of gypsum board barrier and s and steel septum.



### **DOORS**

Doors are available in the same style as panels Type 1, 2 or 3, L.H.H. or R.H.H. swings, and in single or double configuration. Magnetic gasket seals, neoprene seals, mechanical closures are among the options available. Custom sizes and styles area available, consult your local dealer or the factory for details.

#### WINDOWS

Single or double glazed windows are used with Type 1 panels, double glazed windows are usually used with Type 2 and Type 3 panels. Triple glazed windows and operating windows are available as options, consult your local dealer or the factory for details.

## NOISE REDUCTION

Noise reduction will vary with the type and design of panel. Eckel Industries will recommend the panel style to suit the acoustical characteristic required by the customer.

Panels are tested by an acoustic laboratory according to the ASTM C-423 and ASTM E-60 standards.

TRANSMISSION LOSS (dB) ASTM E-90

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FREQUENCY (Hz)	125	250	500	1000	2000	4000	STC		
Panel Type 1; CL, H & C-Batten	19	30	39	50	58	60	41	Single Wall	
Panel Type 2; C, HD & CD-Batten	24	32	44	53	58	59	44	Single Wall	
Panel Type 3; XHD-Batten	31	44	57	63	68	67	53	Single Wall	
Double Wall Panel Type 2; C,	44	59	75	86	91	95	76	Double Wall	
	''	"					1		
HD & CD-Batten		1			1	J	<del></del>		

**ABSORPTION COEFFICIENTS ASTM C-423** 

	ABSURPTION CUEFFICIENTS ASTRI C-425									
1	FREQUENCY (Hz)	125	250	500	1000	2000	4000	NRC		
	Panel Type 1; CL, H & C-Batten	0.71	1.14	1.16	1.06	1.04	1.13	.95	Single Wall	
	-Panel-Type-2; C, HD & CD-Batten	0.51	1.10	1.12	1.06	1.05	0.93	.95	Single Wall	
-		0.58	0.66	1.06	1.11	1.03	0.84	.95	Single Wall	
	Panel Type 3; XHD-Batten	0.50	0.00	1.00						