

# ACOUSTICAL BAFFLE & WALL PANEL SYSTEMS



These two most popular **CMA Acoustical Systems** compliment each other for applications in the same environments, namely schools, gyms, swimming pools and industrial workplaces.

Baffles may be hung vertically in a variety of designs or hung horizontally - clouds. **CMA Baffle Systems** provide the most sound absorption per unit because they are effective in absorption from all sides. Acoustical performance is usually published in sabins per unit.

Baffles are available as a standard in three different facings. The most popular encapsulation material is nylon sailcloth for a softer, fabric look without the fabric price. A new trend in application for baffles are in restaurants with exposed structures in order to reduce the reverberation time.





CMA usually recommends that Baffles and Wall Panels be installed in a space in equal quantities of sabins (sound absorption per square foot). The popularity of CMA Wall Panels and Baffle Systems lies in the ease of installation. Wall Panels are generally hung from the wall surface from hooks at the top through grommets in the Panel. We further suggest the mounting “B” installation for a cleaner smooth facing. Complete hanging details, suggested layouts, as well as hardware for installations are available from CMA, or in our architectural binder.

CMA provides Baffles and Wall Panels that are the lowest cost finished products specifically designed for acoustics. Budget material and installed costs are available upon request from your CMA Sales Representative.



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## Mounting Options

“A” Slight puckering on fabric face

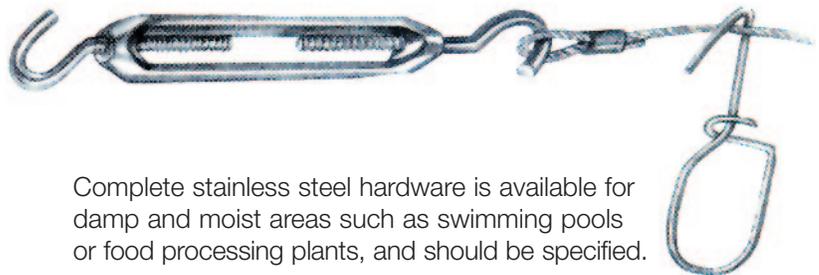


“B” Clean, smooth, facing



## Selected Examples of Mounting Hardware

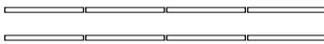
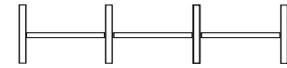
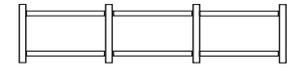
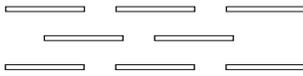
Item	Description
CS 1001	Cable Crimp Sleeve
TB 1002	Turnbuckle
CT 1000	Crimp Tool
TR 500	11" Nylon Tie Wraps
L 803	3" "L" Hook Screw
2H4	Beam Clamp 3/32" - 9/64"
4H24	Beam Clamp 1/8" - 1/4"
HWC-3	Hanger Wire Clip
AC 1000	7 x 7 Aircraft Cable - 3/32"



Complete stainless steel hardware is available for damp and moist areas such as swimming pools or food processing plants, and should be specified.

Hardware Note: Although CMA baffles are very light weight, the hanging cable may sag under the baffles weight depending on the size, thickness and density of the baffles. Consult CMA for specific recommendations for vertical supports and spacing.

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System	Standard Thickness	Standard Density	Standard Widths	Maximum Widths	Standard Length	Maximum Length	Standard Facings	Acoustical Range
Acoustical Baffle Systems	1, 1-1/2, 2"	1-1/2 - 7#	18, 24, 36, 48"	48"	2, 4'	8'	PVC, PVF, Sailcloth	.90 - 1.15
Acoustical Wall Panel Systems	1- 2"	2-1/2, 3, 4, 6#	24, 48"	48"	2, 4, 8'	8'	PVC, PVF, Sailcloth	.65- 1.15

## Selected Acoustical Tests - Baffles & Wall Panels

Octave Band Center Frequency, Hz										
Acoustical Material	Description	Mounting	125	250	500	1000	2000	4000	NRC	Test #
<i>All Baffle Tests expressed in sabins per 2 x 4 baffle</i>										
2" x 1.5#	4.0 mil Sailcloth	E795-00-J Parallel Rows	2.88	7.76	12.96	13.36	9.20	5.84	10.80	RAL A05-180
2" x 3#	4.0 mil Sailcloth	E795-00-J Parallel Rows	1.75	5.14	10.79	13.12	8.69	4.60	9.45	RAL A97-49
2" x 1.5#	4.0 mil Perf. PVC	E795-00-J Parallel Rows	2.21	6.84	12.37	15.53	14.58	14.68	12.35	JM Tech Ctr A2003-075-1
2" x 1.5#	4.0 mil Perf. PVC	E795-00-J Perpendicular Rows	2.52	6.51	11.28	13.36	13.13	13.04	11.05	JM Tech Ctr A2003-075-3
<i>All Wall Panel Tests expressed in sabins per square foot</i>										
2" x 2#	4.0 mil PVC	A	0.18	0.86	1.16	1.13	1.00	0.79	1.05	JM Tech Ctr A01-116-1
3" x 1.65#	4.0 mil PVC	A	0.67	1.00	1.15	1.04	1.03	1.04	1.05	RAL A98-191
2" x 2#	4.0 mil PVC	D-100	0.57	1.10	1.11	1.07	1.02	0.89	1.10	JM Tech Ctr A01-116-7
2" x 2.5#	4.0 mil PVC	D-100	0.51	1.13	1.17	1.17	1.09	0.98	1.15	JM Tech Ctr A2002-017

1. Mounting: (a) E-400 Ceiling Mount is 14" depth; (b) "A" Mounting is directly against structural wall with no air space; (c) D-100 (100mm) utilizes a 4" air space behind fiberglass.
2. All test for Sound Absorption are in accordance with ASTM C-423-99a. Actual installed values may vary depending upon many variables, such as type of construction and humidity.

NOTE: All encapsulated products consist of a selected facing completely surrounding the fiberglass core. In order not to damage the core during fabrication, the facing is loose and may exhibit wrinkles or "puckers" under critical examination. This fabrication technique enhances the acoustical qualities, but encapsulated materials cannot be judged in the same manner as engineered wall panels with resin hardened edges.