

CMA BANNER SYSTEMS



CMA horizontal Banners are designed for application in all types of indoor arenas, sports facilities as well as convention centers and school auditoriums. CMA Banners are an inexpensive alternative to conventional suspended ceilings and are an aesthetically pleasing solution to excessive arena noise.

Banners are available in a variety of colors in both perforated polyvinyl chloride (PVC) and ripstop nylon sailcloth. Typical banners are 2-3" thick with a density of the encapsulated fiberglass of 3/4 to 2.0#. Banners should always be completely encapsulated to prevent MMF (man made fibers) from entering the interior environment.

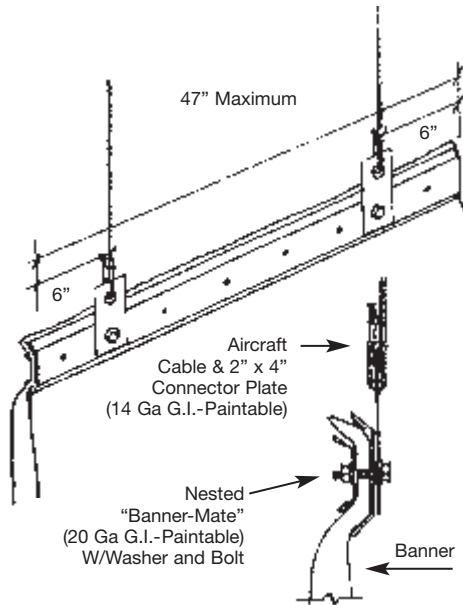
CMA Banners provide the architect and installing contractor the flexibility of many different architectural looks and inexpensive installation alternatives. Banners can be draped across and attached to pre-strung cables, or attached directly to the building's structure. In our architectural binder we show several methods of attachment. CMA offers a complete set of hardware accessories to fit any architectural design. For particular applications consult your CMA Sales Representative or call our toll-free number, 866-730-9750.



| System | Stand. Thickness | Stand. Density | Stand. Widths | Max. Widths | Stand. Length | Max. Length | Stand. Facings | Acoust. Range |
|---------------------------|------------------|----------------|---------------|-------------|---------------|-------------|----------------------|---------------|
| Acoustical Banner Systems | 1 - 3" | 1, 1-1/2, 2# | 48" | 48" | 8' | 25' | Sail Cloth Perf. PVC | .85-1.15 |

Selected Acoustical Tests - Acoustical Banner Systems

| Acoustical Material | Description | Mounting | Octave Band Center Frequency, Hz | | | | | | | Test # |
|----------------------|-----------------------------------|----------|----------------------------------|------|------|------|------|------|------|-------------|
| | | | 125 | 250 | 500 | 1000 | 2000 | 4000 | NRC | |
| 3" x 1.65# | 1.5 mil perf. PVC | A | 0.67 | 1.00 | 1.15 | 1.04 | 1.03 | 1.04 | 1.05 | RAL A98-191 |
| 3" x 1.65# Festooned | 1.5 mil perf one side, 24" arches | E-795 | 0.93 | 0.89 | 1.18 | 1.18 | 1.19 | 1.10 | 1.10 | RAL A98-190 |
| 2" x 3/4# | 3 mil PVC perf one side | E-400 | 0.86 | 0.89 | 0.89 | 1.01 | 1.02 | 1.11 | 0.95 | RAL A00-46 |
| 2" x 1.5# Festooned | 1.5 mil PVC 24" arches | E-795 | 0.87 | 0.89 | 1.21 | 1.26 | 1.26 | 1.24 | 1.15 | RAL A03-179 |



1. All Banner tests expressed in Sabins per square foot.
2. Mounting: (a) "A" Mounting is directly against structural wall with no air space: (b) E-795 is a variation of E-400 ceiling mount for Banner Systems - 14" air space: (c) E-400 utilizes a 14" plenum space
3. 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.