

# Noise Control Panel Systems

**Three** panel systems with **Two** exclusive lift-out panel designs can provide easy access to any part of your equipment!



Shown above is an Exclusive patented construction comprised of a fabricated framework unto which the modular side panels are hung and on which the roof panels are placed.

The complete accessibility feature makes it possible to locate the enclosure near the machine with only enough clearance to allow the machine to operate, thereby saving floor space.

**EAGLE** noise enclosures are furnished with telescopic adjustable bases and posts to accommodate building floor level variations.

All windows are single glazed or double glazed 1/4 thick Lexan MR5.

Enclosures can be furnished with galvanized steel or painted steel finish.

All removable panels are equipped with handles to permit lifting any one of the panels out of the enclosure framework without disturbing the adjacent panels.

Please note: This is a composite brochure. More detailed literature for each product is available upon request.

## FEATURES

### NOISE REDUCTION

Our Exclusive panel construction allows for a combination of acoustical components to be used in the manufacturing process to obtain the optimum noise reduction possible. See our noise reduction specifications.

### EASILY INSTALLED

Can be installed by your own maintenance crew.

### PORTABLE

Unit can be easily relocated at any time.

### ACCESSIBLE

All panel units are removable for easy access to any part of the equipment.

### LIGHTWEIGHT

Through the unique patented construction, it is possible to accomplish a high noise reduction rating with a minimum panel weight. A single panel size of 2' wide by 7' high weighs only 70 pounds, which can easily be handled by one person.

### SIZE FLEXIBILITY

All components of the framework and surface panels are modular. The entire enclosure can be extended or reduced in length at any time to suit change of equipment.



# Eagle Panels

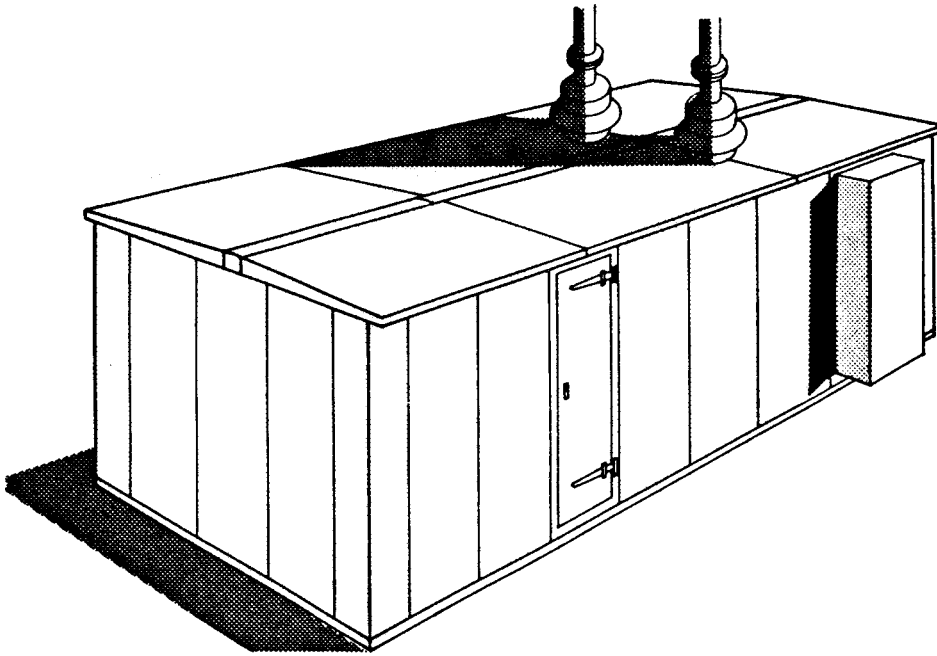
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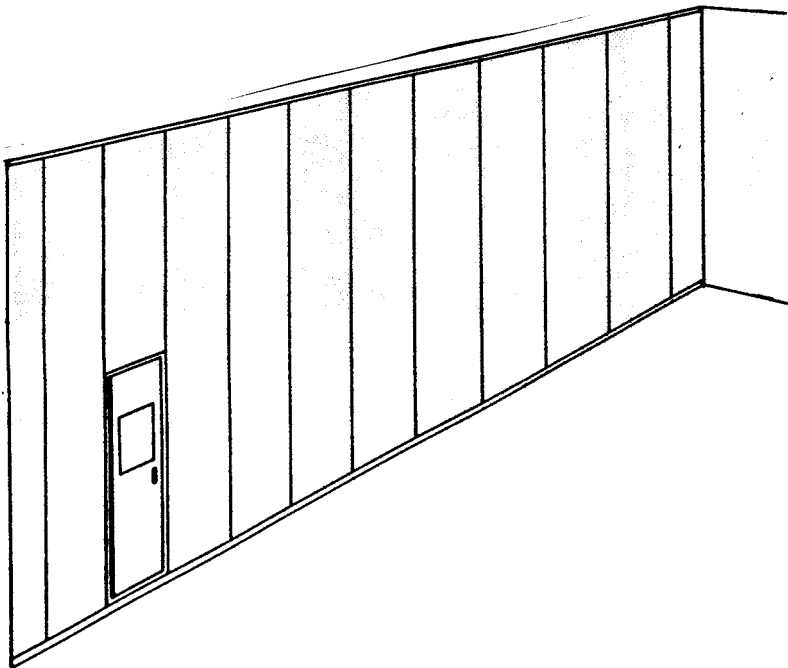
# Structural Panels

## Acoustical - Insulated



### FEATURES

- ▶ Interlocking panels are self-supporting and require a minimum additional framework.
- ▶ Modular panel design permits total flexibility to form enclosures and walls of all shapes and sizes.
- ▶ Variable panel facing: painted steel, galvanized steel, stainless steel.
- ▶ Panel thicknesses of 2", 3" and 4" are available as standard.
- ▶ Combination of solid exterior panel facing and perforated interior facing provides maximum noise absorption as well as noise transmission retention.



#### Sound Transmission At frequency of

	125	250	500	1000	2000	4000
2" thick 3.0 pcf Fiberglass	14	20	31	37	39	35
3" thick 3.0 pcf Fiberglass	17	23	34	40	42	38
4" thick 3.0 pcf Fiberglass	21	28	39	48	56	58

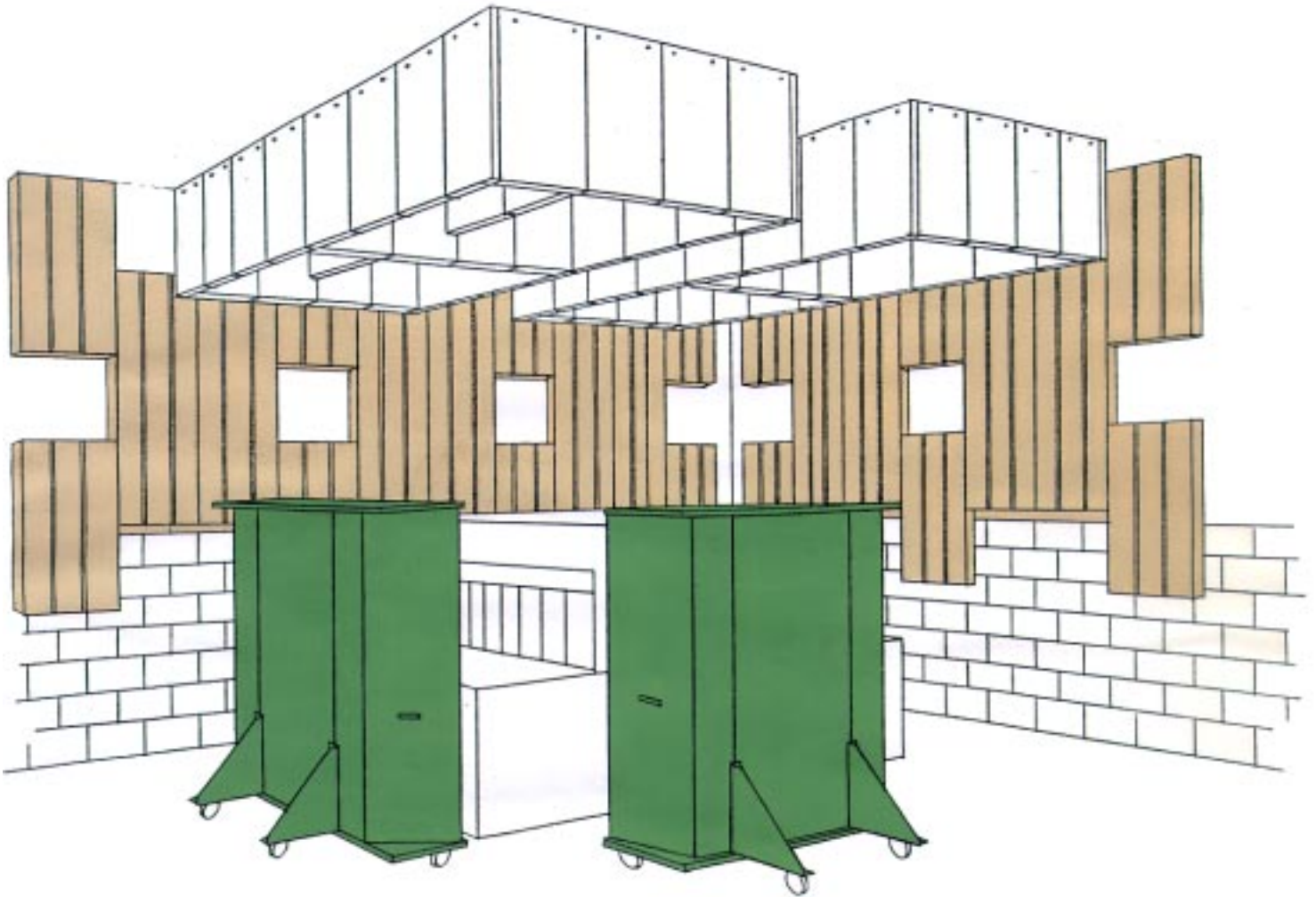
The panels have been tested at the Geiger and Hamme Acoustical Laboratories, Ann Arbor, Michigan.

#### Sound Absorption Coefficient At frequency of

	125	250	500	1000	2000	4000	N.R.C
2" thick 3.0 pcf Fiberglass	.27	.84	1.01	.91	.89	.80	.90
3" thick 3.0 pcf Fiberglass	.45	1.05	1.18	1.06	1.04	1.02	.95
4" thick 3.0 pcf Fiberglass	.52	1.06	1.10	1.12	1.05	.92	1.08

The panels have been tested at the Geiger and Hamme Acoustical Laboratories, Ann Arbor, MI

# Portable Tuned Reactive Baffle Units



## INTRODUCTION

The ideal method for treating a piece of equipment generating excessive noise levels is to completely enclose the equipment with our patented Eagle Removable Panel System. There are occasions, however, where completely enclosing the equipment is not practical for various reasons; these include equipment visibility, accessibility and ventilation requirements.

In conjunction with wall absorber panels and ceiling baffles, it is sometimes necessary to position floor mounted, free

standing absorber units at specific locations surrounding the equipment.

The tuned reactive baffle design combines the advantages of both *dissipative* and *reactive* silencing techniques.

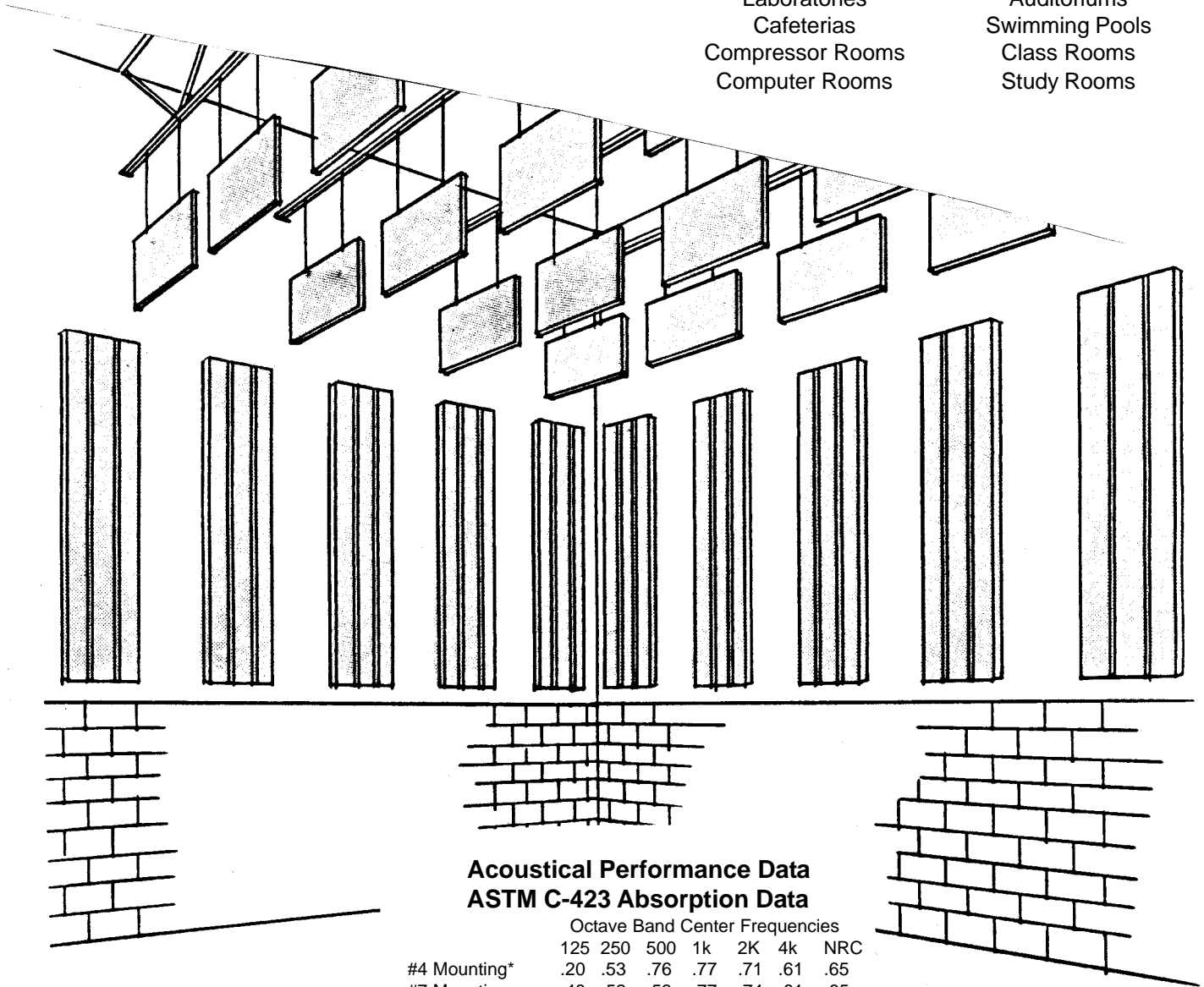
The construction of the baffles is such that an increase in absorptive surface is achieved as a by-product of the geometric configuration of the baffle/cavity combination. This increase in absorptive surface area provides improved performance over a typical absorber of similar dimensions. In this instance, acoustic energy is converted to heat energy and is *dissipated* over time.

# Acousta-Baffle

## Noise Control Panel System

### APPLICATIONS

Factory Production Areas	Gymnasiums
Laboratories	Auditoriums
Cafeterias	Swimming Pools
Compressor Rooms	Class Rooms
Computer Rooms	Study Rooms



### Acoustical Performance Data ASTM C-423 Absorption Data

	Octave Band Center Frequencies						
	125	250	500	1k	2K	4k	NRC
#4 Mounting*	.20	.53	.76	.77	.71	.61	.65
#7 Mounting+	.48	.52	.53	.77	.74	.61	.65

\*Panels are in direct contact with a solid surface.  
+Panels are mounted with a 15" airspace between the panel and a solid surface.

### DESCRIPTION

This literature covers various applications of Flexible Wall Absorber Panels and Suspended Vertical Baffles. The customary procedure is to position the panels in uniform rows and spacings, whereas the artwork shown in this literature demonstrates how variations in the spacing and arrangement of the absorber panels can improve the acoustical performance of the panels.

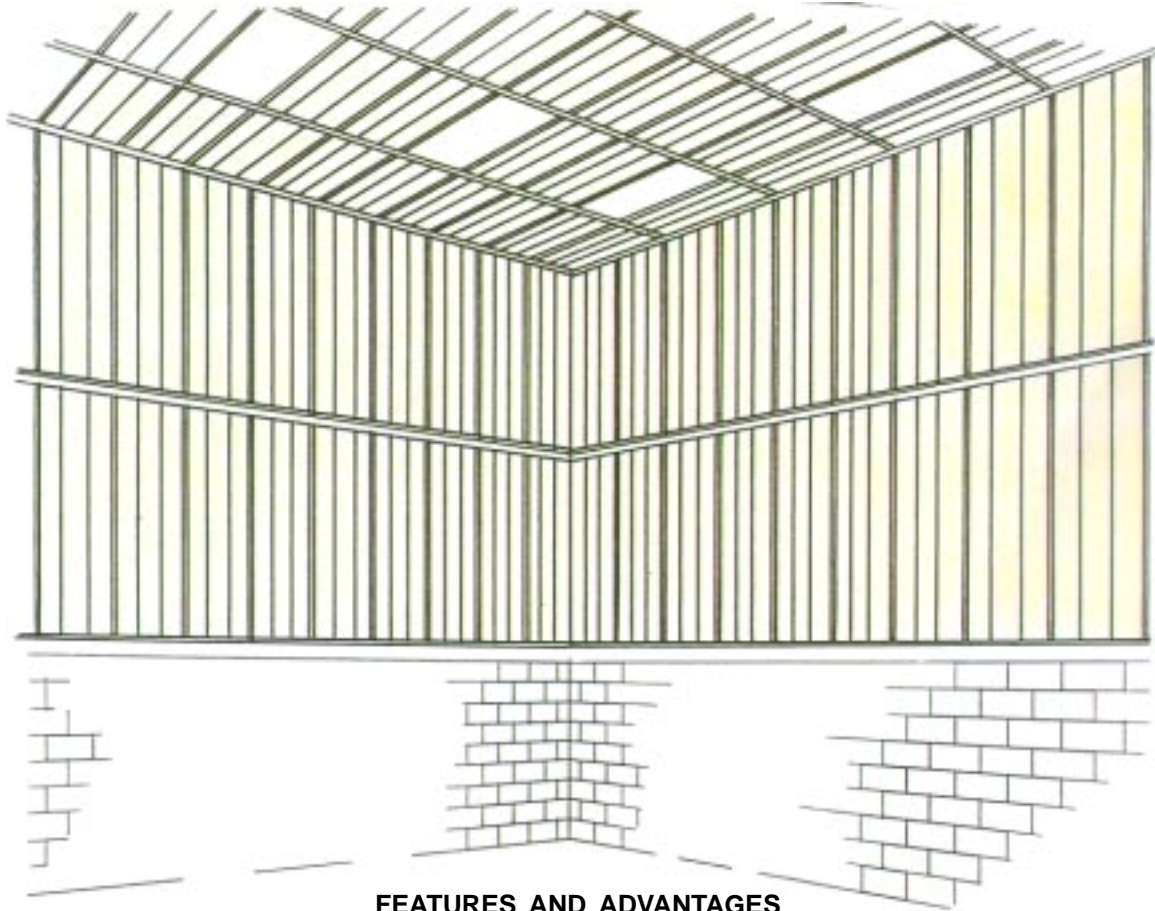
The ultimate solution is to place the equipment inside a complete acoustical enclosure; however, many times this is not practical. The products described in this literature will be depicted in arrangements suggested to treat equipment which cannot be entirely enclosed.

# Acoustical Absorber

## Wall and Ceiling Units

### APPLICATIONS

Factory Production Areas	Gymnasiums
Laboratories	Auditoriums
Cafeterias	Swimming Pools
Compressor Rooms	Class Rooms
Computer Rooms	Study Rooms



### FEATURES AND ADVANTAGES

All continuous wall lining panels are individually removable, easily lifted up and out of the bottom and top retainer channels for immediate access to the area behind the paneling. No fasteners, "H" joiners, batten strips or clipping devices are used to retain the panels. Panels can be constructed to accommodate either a 2", 3" or 4" thick acoustical fill.

All components are totally prefabricated to suit each individual wall area. The standard panel module can be any width up to 36" with compensation modules at ends of walls or between door openings, thereby eliminating the cutting of panels at the job site. All panel facings are equipped with equally spaced vee grooves to separate the acoustical fill from the panel face and reinforce the panel.

### Sound Absorption Coefficient at frequency of

	125	250	500	1000	2000	4000	N.R.C.
2" thick 3.0 pcf Fiberglass	.14	.66	1.15	1.06	.90	.79	.95
3" thick 3.0 pcf Fiberglass	.21	.89	1.18	1.04	1.00	.86	1.05
4" thick 3.0 pcf Fiberglass	.52	1.06	1.10	1.12	1.05	.92	1.08

The panels have been tested at the Geiger and Hamme Acoustical Laboratories, Ann Arbor, Michigan.

# Noise Enclosure

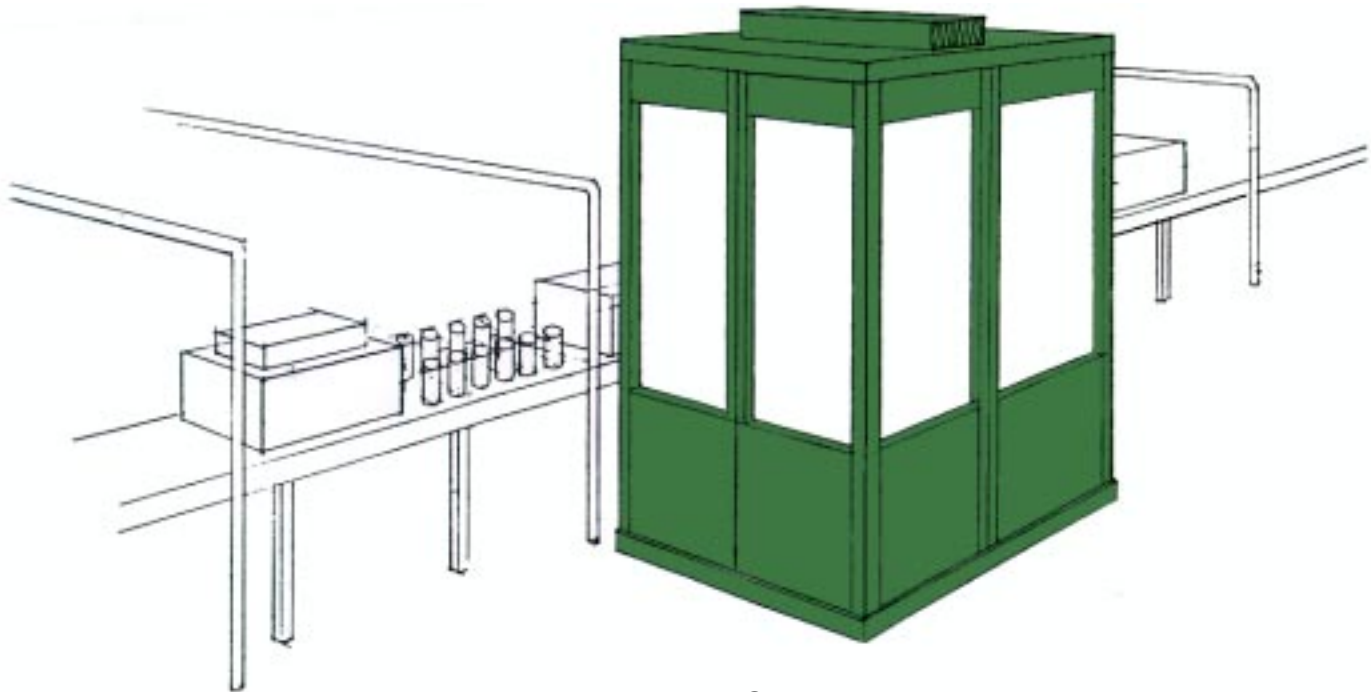
## for Wire Braiding Machines



### FEATURES

- Unique *Acousta-Glide* slide doors for quick operator access and conservation of valuable floor space. Slide doors close without latching apparatus. Rear pair of doors provides instant access to equipment.
- Ventilation system comprised of an air in-take duct, an air exhaust duct and an air exhaust fan
- Entire enclosure is constructed of the Eagle 3" thick patented Removable Panel System.
- Front panel is reinforced to support sensor tube bracket.
- Windows are constructed of 1/4 thick Lexan MR5
- Enclosure finish can be either galvanized steel or painted steel or any selected color.
- Entire enclosure is assembled with a minimum number of pieces. Basic enclosure requires level or grouted floor. If the floor level is irregular, auxiliary floor channel is provided along with shims in order to permit setting the enclosure in a level position.
- All enclosure components are entirely factory fabricated and require no cutting or fitting at the time of installation.
- Enclosure functions as both a guard and a means for reducing operator exposure to noise.
- If you have existing enclosures which are not acoustical, we can provide you with a kit to line the interior faces with dampening and absorbing materials.

# Plant Offices ✧ Pulpits ✧ Control Rooms with Tuned Reactive Baffle Ceiling



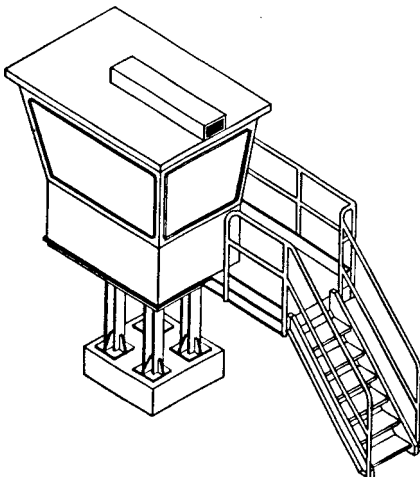
## INTRODUCTION

Whenever plant personnel are required to work within any type of enclosure, they must be provided with maximum visibility on all sides. In the past enclosures were able to accomplish privacy and quiet by providing visibility on one or two walls and acoustically absorbent panel faces on the balance of the walls and the ceiling.

With the advent of automation, it is now necessary to provide visibility on all four walls. However, this limits the acoustical surfaces within the enclosure to the panel area below the windows and the ceiling. In most cases, this sort of arrangement does not provide adequate acoustical treatment, especially when computer equipment is part of the operation within the enclosure.

The Eagle Personnel Enclosure System provides total visibility without sacrificing acoustical comfort. This is accomplished through the use of our unique Tuned Reactive Baffle Ceiling System.

The tuned reactive baffle design combines the advantages of both dissipative and reactive silencing techniques. The construction of the baffles is such that an increase in absorptive surface is achieved as a by-product of the geometric configuration of the baffle/cavity combination. This increase in absorptive surface area provides improved performance over a typical absorber of similar dimensions. In this instance, acoustic energy is converted to heat energy and is dissipated over time.



### Prefabricated Noise Isolation Booths for:

- Operator Booths for one or more persons
- Sawyer Booths
- Inspections Booths
- Observation Booths
- Interior and Exterior Applications

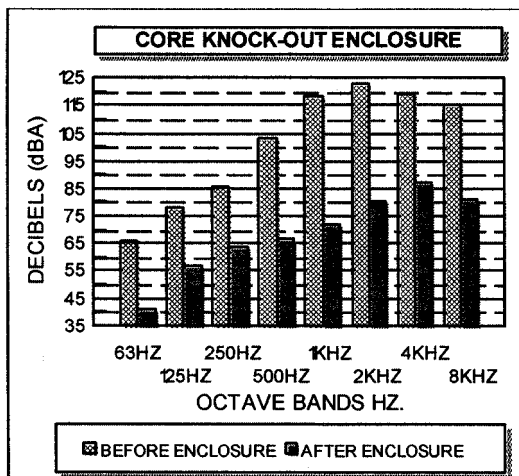
# Noise Enclosure

## for Core Knock-Out Machines



### FEATURES

- ▶ Completely plant assembled units with eyelets for crane or tow motor lifting.
- ▶ Air operated vertical lift door for feeding parts into machine.
- ▶ 16" x 16" window constructed of 1/4 thick Lexan Margard.
- ▶ Enclosure finish either galvanized steel or painted steel (to select color)
- ▶ Panels are 4" thick.
- ▶ Enclosure is equipped with a rear door for servicing the equipment.
- ▶ Enclosure base permits adjustment for floor level variations.



*learn more at*

[www.eaglepanels.com](http://www.eaglepanels.com)

*or*

*e-mail [info@eaglepanels.com](mailto:info@eaglepanels.com)*

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