

EAGLE Noise Enclosures

A new do-it-yourself system on the market.

Isolate unwanted, irritating industrial noise by building an enclosure which is effective. Removing irritating noise levels will create a pleasant working atmosphere, increasing productivity.

Build an enclosure for one machine or a complete department. Do it yourself with our prefabricated interlocking panels.

EAGLE panels are designed to soak up noise. **EAGLE'S** panels are sturdy, self-supporting, rigid units manufactured from 20 gauge steel, inside and out. The absorptive surface is perforated. Sandwiched between the two metal skins is a sound absorbing mineral fiber that does the job. The interlocking, rolled steel channels are patent louvered for minimum heat and sound transfer.

With our assistance, you design and you build the enclosed area. We'll-supply all the easy to assemble parts need.

EAGLE PANELS

AN ADVANCE COMPANY

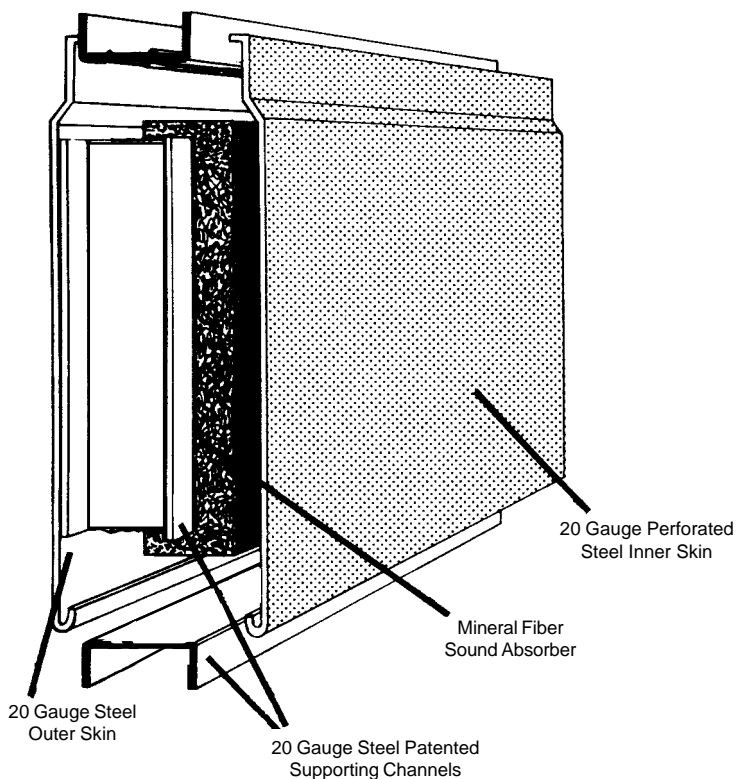
2500 BROOKPARK RD.

CLEVELAND, OHIO 4134-1407

216-771-1800 216-741-7153

1-800-988-0632 1-877-868-4890(FAX)

e-mail-info@eaglepanels.com www.eaglepanels.com



The practical approach to sound attenuation.

FIRST: It is usually wise to see if the noise can be reduced at the source. Attempt to decrease the radiated power and reduce vibration amplitudes.

1. Decrease the energy available driving the vibrations.
2. Change the coupling between the energy and the acoustical radiating system.
3. Change the radiating structure so it radiates less sound.

SECOND: Control the path of sound is the next choice.

1. Change the relative position of the sound and the listener.
2. Change the acoustic environment.
3. Build a **Sound Enclosure** between the noise and the listener.

THIRD: Apply sound protective devices to the listener.

1. Periodic clinical hearing examinations.
2. Ear plugs, ear muffs, helmets.

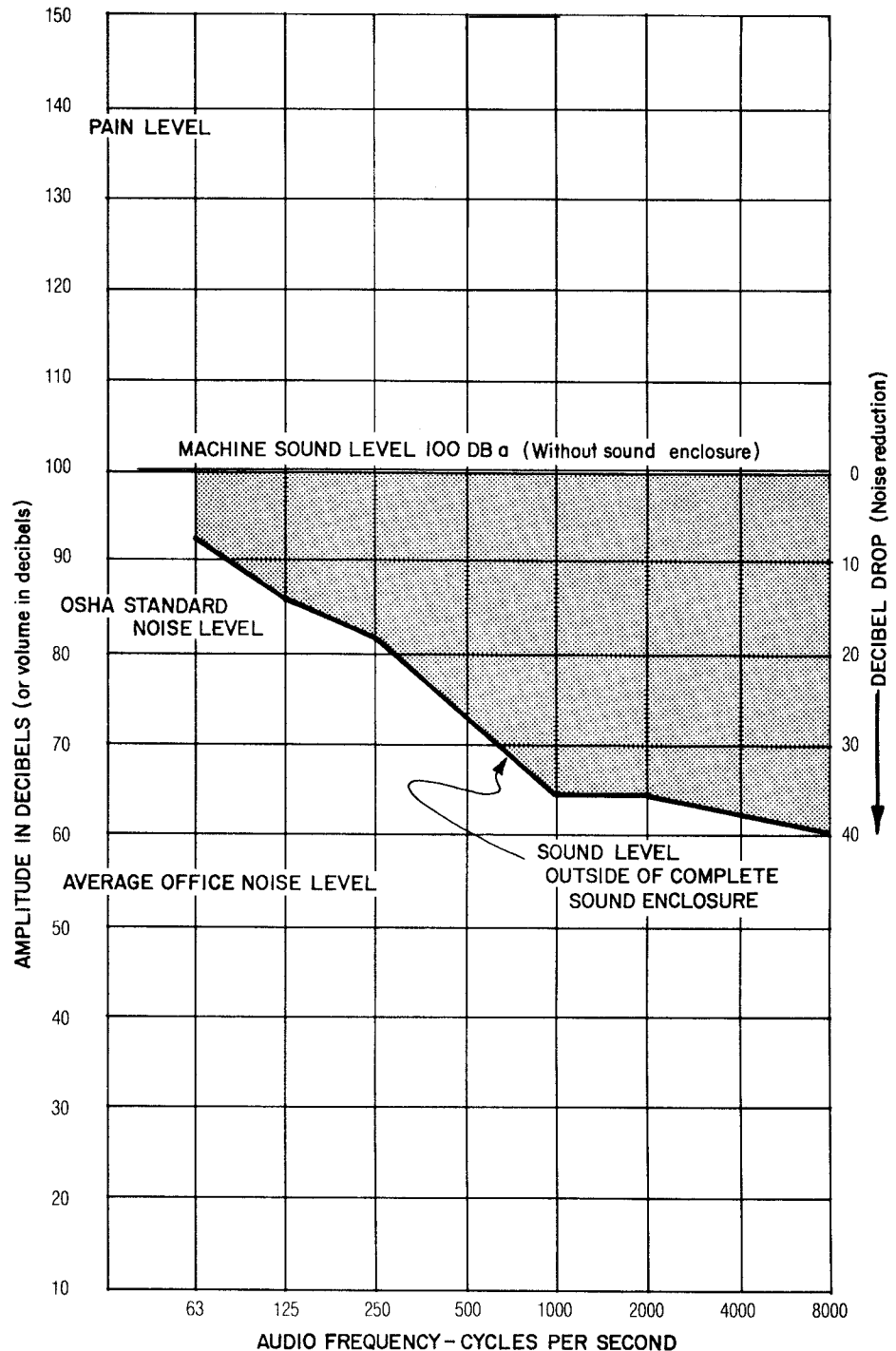
It is within this second category "Control the path of sound", where **EAGLE'S PANELS** play such an important part. When you cannot reduce the noise source, you must follow with the second approach. **EAGLE** not only provides standard sound enclosures, but can provide special equipment in the following areas:

1. Provide special materials to withstand corrosive atmospheres.
2. Polyvinyl bagged acoustical materials where liquid splash or condensate or cleaning is a problem.
3. Utility access plugs for electric, gas, steam, water, oil or sewage where necessary.
4. Swing doors, lift doors, sliding doors, bi-fold and tri-fold doors for close clearances.
5. Sound reducing vision panels or lighting panels.
6. Inner septims where lower frequency noise is a problem.
7. Rubber or polyurethane isolation couplings or pads or mounting blocks.
8. Heating, lighting and cooling available.
9. Ventilation ducts, fans and work process openings which are sound attenuated.
10. Manual or powered rolling sections for quick machine access.
11. Exterior weather tite roofing.
12. Material handling sound attenuating devices.
13. Easy assembly and disassembly for moving.
14. Self-supporting, no structural framing required.
15. Step by step assembly instructions.

FIELD & TEST DATA

The table shows the approximate noise transmission drop resulting from previous field installations and laboratory test data of com-

EAGLE'S standard enclosure acoustical reduction table



plete enclosures. The curve has been adjusted to what can normally and practically be used, under field conditions, as a decibel drop in a given frequency range, for a given source of sound.

Example: Machine noise level of 100 decibels @ 1000 CPS.

The table shows that at 1000 CPS we can expect 35 decibel noise reduction. $100 - 35 = 65$ DB. This means that after the machine is completely enclosed by a properly constructed sound enclosure, the sound level outside of the enclosure would be approximately 65 decibels. The right half of the table shows that we can expect to reduce the higher frequency noises 35 decibels. The left half of the table shows that we can expect to reduce the lower frequency noises by only 15 decibels in standard enclosures. This is to say that although it becomes more difficult to reduce low frequency (impact type) noise, additional measures such as septims can be employed by **EAGLE**. You can easily apply the above data to your standard needs. Should special requirements arise, call us and we will discuss a possible solution to meet your needs. Phone **1-800-988-0632**.