

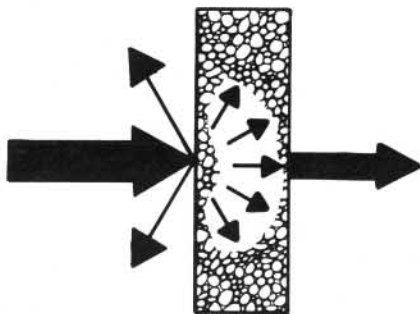
# Do-It-Yourself Noise Control Materials

from McGill AirSilence LLC

## There are three basic ways to reduce noise in most applications:

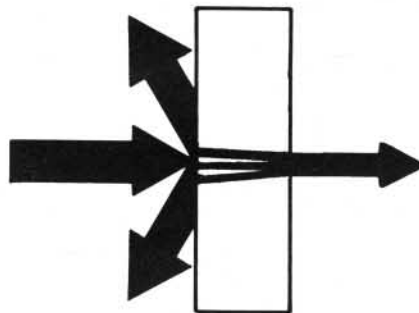
### 1. ABSORPTION

Materials that absorb noise have an open fibrous structure that allows sound to enter. The internal strands or fibers of the material vibrate, and the resulting mechanical movement dissipates the energy in the form of a minute amount of heat. Absorbing materials are used to reduce the reverberant noise build-up from inside buildings, rooms, working spaces or equipment housings.



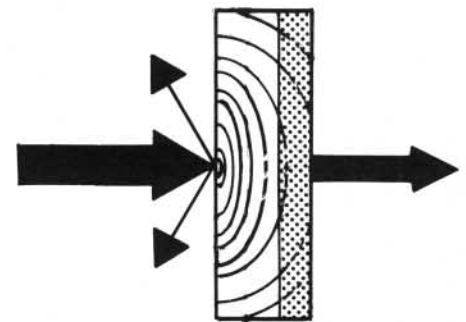
### 2. BLOCKING

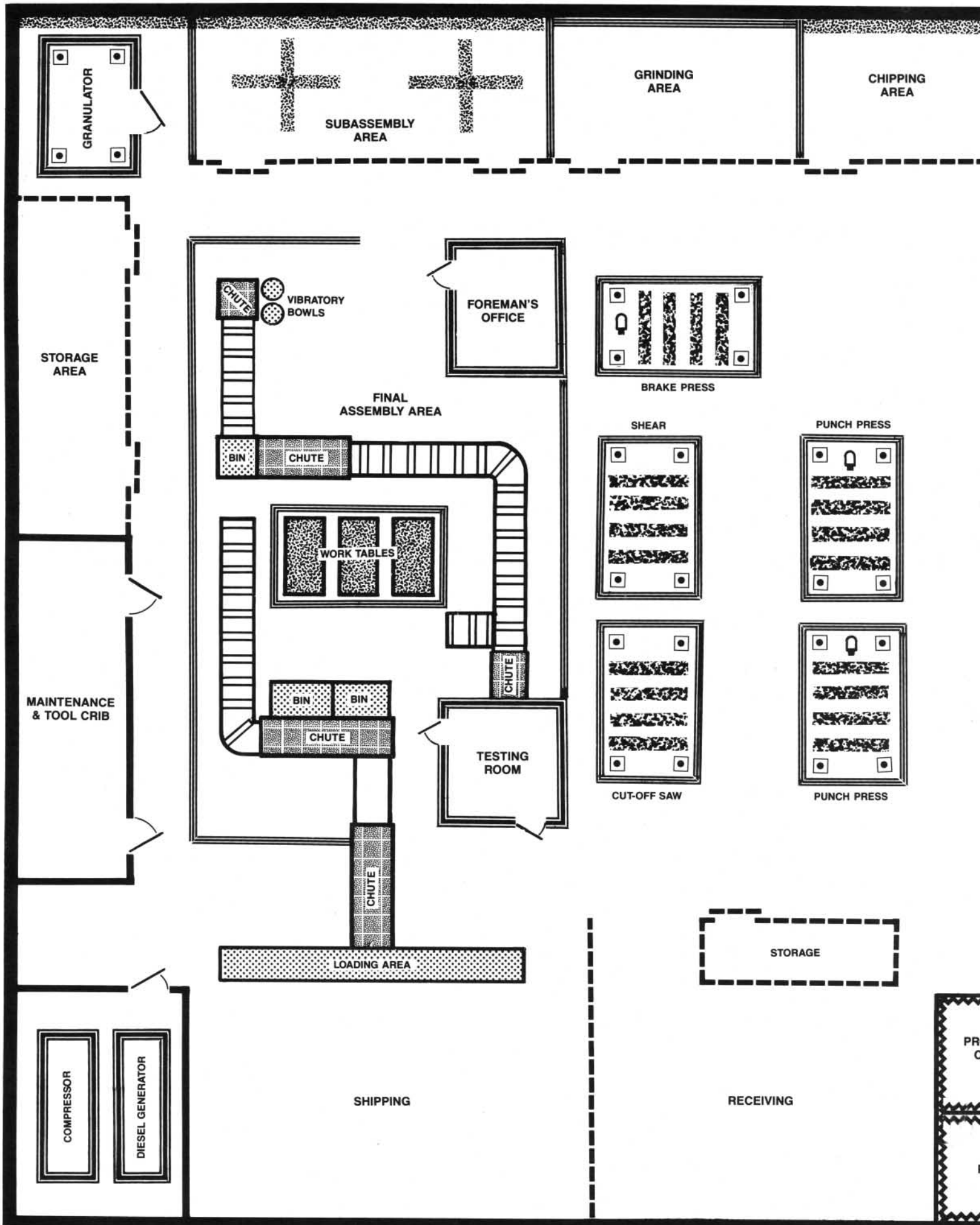
Blocking materials provide a barrier to noise. Blocking materials do not absorb or deaden noise, but rather block the direct path of the noise by reflecting it away from the receiver. Performance is based on the mass and density of the material. The greater the mass and density the better the barrier. Blocking materials can be used as a barrier to enclose the noise source or as a barrier to enclose the potential receiver of the noise.



### 3. DAMPING

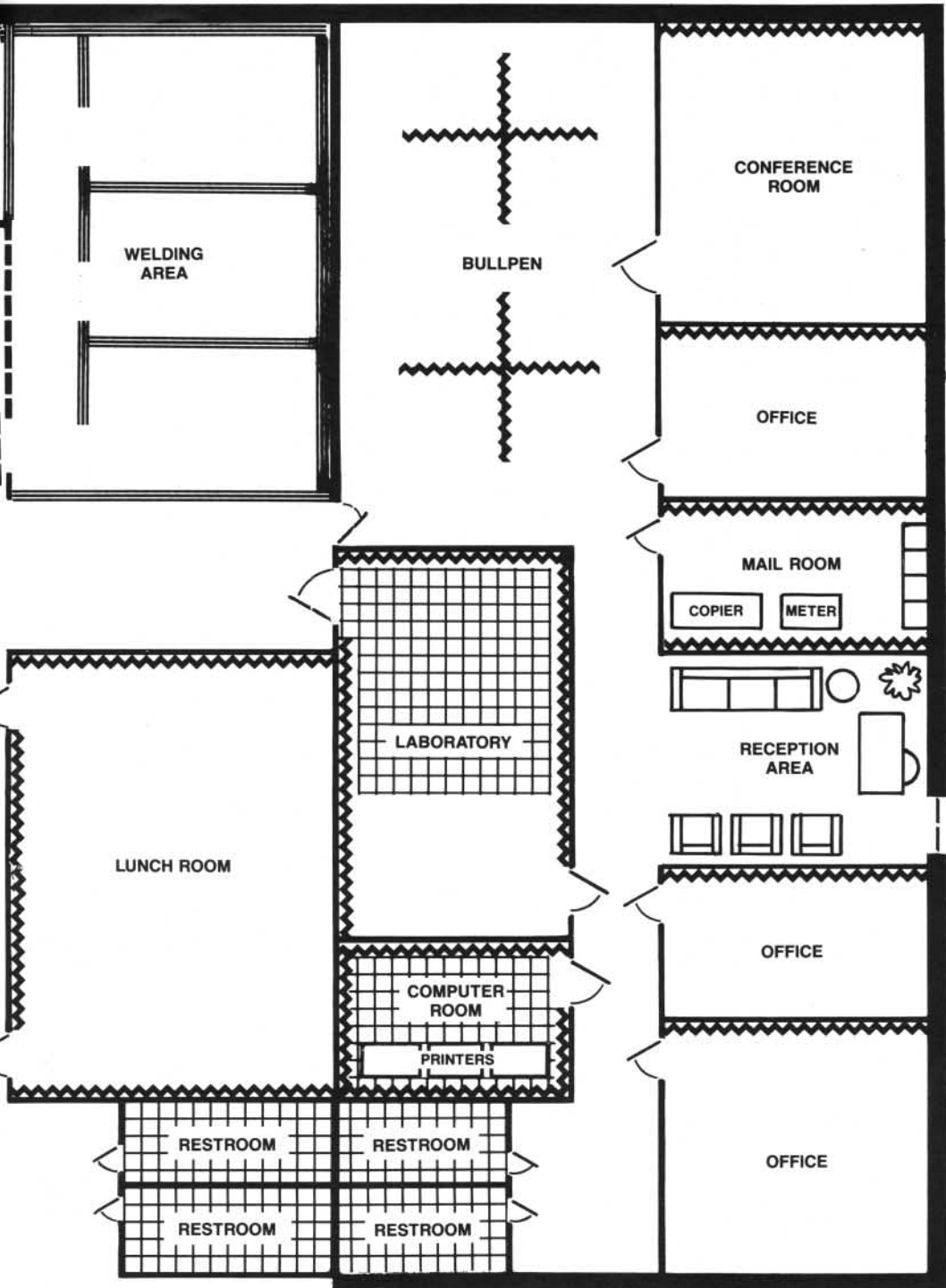
Damping materials reduce noise radiation from metal surfaces by damping the vibration of the metal. This applies both to continuously radiating surfaces as well as those with intermittent metal impact. Damping materials are applied directly to the surface of a vibrating structure and will convert the mechanical vibrating energy of the surface to heat. The minute flexing of the damping material provides the energy dissipation to reduce noise. The materials are a cost-effective way to eliminate the ringing sound of vibrating sheet metal or the irritating impact noise in conveyer chutes and bins.





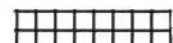



PLANT AREA




**McGill AirSilence's  
Do-It-Yourself  
Noise Control Materials**



**ABSORPTION**

-  Acoustical Foam
-  Ceiling Absorber
-  Ceiling Tile
-  Wedge Foam

**BLOCKING**

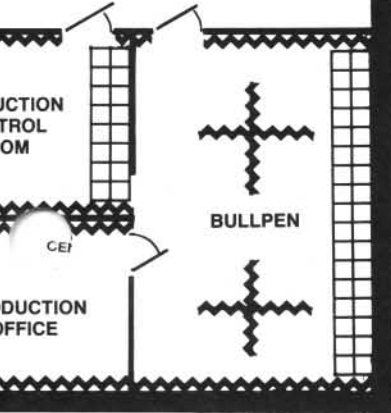
-  Vinyl Curtain
-  Fibersorb Curtain
-  Pneumatic Silencer

**DAMPING**

-  Damping Tile
-  Damping Compound
-  Vibrator Pad

 **Custom Metal Enclosure**

**Note:** Use custom metal enclosures for required noise reductions of 25 dBA or greater. Contact McGill AirSilence for more information.



**OFFICE AREA**

# McGill AirSilence Noise Control Applications

METHOD OF NOISE REDUCTION	PRODUCT	APPLICATIONS
<b>ABSORPTION</b>	<b>Acoustical Foam</b>	<ul style="list-style-type: none"> <li>• Liners for equipment housings, cabinets, shrouds, booths, vehicle cabs</li> <li>• Liners for concrete or metal building walls</li> <li>• Liners for office partitions</li> <li>• Liners for sheet metal or wood enclosures</li> </ul>
	<b>Ceiling Absorbers</b>	<ul style="list-style-type: none"> <li>• Hang in noise reverberation areas</li> <li>• Hang in noisy production offices or working spaces</li> <li>• Hang above curtain enclosures</li> </ul>
	<b>Ceiling Tiles</b>	<ul style="list-style-type: none"> <li>• Use in lay-in grid ceilings in offices, conference rooms, clean rooms and labs</li> <li>• Hang in food, beverage and pharmaceutical processing rooms</li> </ul>
	<b>Wedge Foam</b>	<ul style="list-style-type: none"> <li>• Liner for walls and partitions</li> <li>• Liner for consultation rooms</li> <li>• Liner for gymnasiums, cafeteria walls and indoor pools</li> <li>• Liner for walls around copying machines and printers</li> </ul>
<b>BLOCKING</b>	<b>Vinyl Curtain and Fibersorb Curtain</b>	<ul style="list-style-type: none"> <li>• Enclosure around any machine or operation including presses, shears, granulators, fans, pumps, compressors, grinders, chippers, welders, pulverizers, motors, generators, engine test stands and air conditioners</li> <li>• Pipe and duct lagging</li> <li>• Room or area dividers</li> <li>• Engine room and power plant walls</li> <li>• Temporary barriers at construction sites</li> <li>• Assembly area barriers, dividers and shields</li> </ul>
	<b>Pneumatic Silencer</b>	<ul style="list-style-type: none"> <li>• Screw into exhaust ports of air control valves to reduce noise from air discharge</li> </ul>
<b>DAMPING</b>	<b>Damping Tile and Damping Compound</b>	<ul style="list-style-type: none"> <li>• Liner for chutes, hoppers, conveyors, vibrator bowls, machinery guards, metal cabinets, grinders, food processing equipment, mixing machinery, air conditioning housings</li> </ul>

## McGill AirSilence LLC

An enterprise of United McGill Corporation —  
Founded in 1951

2400 Fairwood Avenue  
Columbus, Ohio 43207-2700  
614/443-5520, Fax: 614/542-2620  
Web site: [mcgillairsilence.com](http://mcgillairsilence.com)  
E-mail: [acoustics@mcgillairsilence.com](mailto:acoustics@mcgillairsilence.com)