Lower Noise Levels And Protect Machinery Foundations And Supports While Reducing Maintenance Costs

Advantages:
- Reduces vibration, shock and structure-borne noise transmission
- Can incorporate leveling features
- Low cost when done at time of initial equipment installation
- Prolong equipment life
- Load range of 10 lbs. to 100,000 lbs. per mount/isolator
- Less equipment down time and increased productivity
- Seismic designs available to meet building codes for new construction
- Stock products available
- For floor mounted or ceiling suspended installations
- Isolators can be combined with structural steel bases and concrete filled foundations to compensate for large unbalanced forces or to maintain proper alignment of components.

Applications:
- Pumps, chillers, cooling towers and other HVAC equipment
- Engines, blowers and compressors
- Drop hammers, grinders and presses
- Rooftop mounted equipment
- Sensitive electronic equipment
- Isolated test beds
- Machinery foundations
- Aircraft, vehicular and shipboard mounted equipment and electronic controls
- Control panels
- Recording studios
- Machine tools
- Isolate in-plant machinery
- Floating floors for audio/video, fitness centers, dance floors, etc.
- Exhaust fans and ventilation systems
- Refrigeration units
- Presses, shears and brake equipment

Typical model HS isolator design features.

HVAC ventilation fan on structural base with type HS isolators.
**Type RN Pad Isolators**

**MATERIAL:** Neoprene, cork, fiberglass, felt or combinations  
**DEFLECTIONS:** Typically 10% to 20% of pad’s thickness  
**EFFICIENCY:** Best for high frequency noise breaks; 50% to 70%  
**APPLICATIONS:** Non-critical, grade or basement

**Type HS Spring Isolators**

**MATERIAL:** Steel compression springs  
**DEFLECTIONS:** Typically 1” to 5”  
**EFFICIENCY:** Best for machines operating below 1200 RPM; 90% to 99%  
**APPLICATIONS:** Critical, light floor constructions

**About BRD HUSH MOUNTS™:**  
BRD HUSH MOUNT™ isolators use their ability to compress or deflect to absorb unwanted vibrations. Efficiencies are outlined above for the major isolator types. A 70% efficiency translates to 30% transmission of vibrational energy. The greater the rated deflection of the isolator, the higher the isolation efficiency will be. Vibration problems are generally classified one of two ways. In force excitation, the isolator is used to protect the supporting structure from forces generated by the supported mass. In motion excitation, the isolator is used to protect the supported mass from disturbances of the supporting structure.

**Type RIS Elastomeric Isolators**

**MATERIAL:** Neoprene, natural rubber and other elastomers  
**DEFLECTIONS:** Typically 0.20” to 0.50”  
**EFFICIENCY:** Best for machines operating above 1200 RPM; 70% to 90%  
**APPLICATIONS:** Non-critical, above floors, minimal unbalanced forces

**Type AB Air Spring Isolators**

**MATERIAL:** Air filled elastomer bag (low profile)  
**DEFLECTIONS:** Equivalent of 6” to 7” for steel springs  
**EFFICIENCY:** Can attain 99+%  
**APPLICATIONS:** Critical, light floor constructions

**Information needed to select BRD HUSH MOUNTS™:**

1) Determine isolator type based on required isolation efficiency and/or application descriptions listed above.  
2) Verify the total equipment operating weight including any uneven weight distribution.  
3) Verify equipment center of gravity and dimensional envelope if known.  
4) Determine the need for integral structural steel bases to maintain drive alignments, compensate for equipment overhang and to add mass for damping unbalanced forces.  
5) Provide details of supporting foundations and supports.  
6) Specify indoor or outdoor installation, vibration or shock, mobile or stationary.  
7) All piping, duct and conduit connections to isolated equipment must be done with flexible joints.  
8) Describe any special environmental conditions (solvents, fuels, ozone, etc. which are present).  
9) Consult BRD to confirm all selections.
Seismic/Isolated Curbs And Rails For Packaged Rooftop Air Conditioning Equipment

Advantages:
- Compatible with equipment of all major rooftop manufacturers
- Manufactured from 11 GA. tubular steel designed to withstand all specified wind and seismic forces including vertical uplift
- Capable of either point support attachment to the building steel or anchor bolt attachment to a concrete pad depending on the roof construction
- Incorporates a means of positive fastening of the rooftop unit to the tubular steel support (Clamping is not acceptable)
- Designed to accept waterproofing in accordance with NRCA guidelines
- Can be supplied knocked down or assembled with optional supply and return air gasketing
- Curbs are self-sealing so ductwork can be connected before the rooftop unit arrives
- Can also accommodate sloped roof construction

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>RSVC-100</td>
<td>Seismic/Isolated 1” deflection roof curb</td>
</tr>
<tr>
<td>RSVC-200</td>
<td>Seismic/Isolated 2” deflection roof curb</td>
</tr>
<tr>
<td>RSVC-300</td>
<td>Seismic/Isolated 3” deflection roof curb</td>
</tr>
<tr>
<td>RSVR-110</td>
<td>Seismic/Isolated 1” deflection rails</td>
</tr>
<tr>
<td>RSVR-220</td>
<td>Seismic/Isolated 2” deflection rails</td>
</tr>
<tr>
<td>RSVR-330</td>
<td>Seismic/Isolated 3” deflection rails</td>
</tr>
<tr>
<td>RVIC-400</td>
<td>Isolation curb that fits standard factory non-isolated curb 1” deflection only</td>
</tr>
</tbody>
</table>

Front and side elevation views of the model RSVC-200 2” static deflection seismic/isolated roof curbs for rooftop packaged AC units.
**HUSH MOUNT™ Industrial Applications**

**Pneumatic Type AB Air Spring System**

Self-leveling air spring design with limit stop restraints.

Screw chiller on type AB System next to school NC-20 auditorium.

HUSH MOUNT™ 3-piece wedge mount design provides built-in compensation for uneven foundations and machine bases.

Stud/panel mounts used for OEM mounting of control panels, motors and other small equipment.

Forging hammer installation using type HDP shock pads.

Typical installation detail of isolated slab/foundation using type MC cork pad material.

Typical installation detail of isolated slab/foundation using type MC cork pad material.

Typical installation detail of isolated slab/foundation using type MC cork pad material.

Type LM machinery leveling mount.