1.0 General

1.01 Related Work Specified Elsewhere
   1) VISCMA 101-07: Seismic Restraint Specification Guidelines for Mechanical, Electrical and Plumbing Systems

   2) (Applicable Seismic Restraint portion of specs - fill in as required)

1.02 Definitions and Referenced Standards
   1) FEMA: Federal Emergency Management Agency

   2) FEMA Seismic Restraint Installation Manuals 412, 413 & 414
      A. FEMA 412: Installing Seismic Restraints for Mechanical Equipment
      B. FEMA 413: Installing Seismic Restraints for Electrical Equipment
      C. FEMA 414: Installing Seismic Restraints for Duct and Pipe

   3) VISCMA: Vibration Isolation and Seismic Control Manufacturers Association


   5) ASHRAE Applications Handbook; Vibration Isolation Chapter

   6) ASHRAE: A Practical Guide to Seismic Restraint

1.03 Performance Requirements
   1) All equipment requiring isolation shall be isolated per Table 48, Sound and Vibration Control Chapter 47 of the 2007 ASHRAE Handbook HVAC Applications.
2) Provide vibration isolators, base frames and inertia bases of sufficient size and design to assure that deflection and stability requirements are met. Isolators shall be provided to deflect uniformly under operating loads.

3) Steel springs shall be selected to perform their function without undue stress or overloading. All isolators shall have a minimum ¼” thick elastomeric or fiber glass acoustical pad within the vertical load path.

4) Stable steel springs shall be designed to operate in the linear portion of their load versus deflection curve and must be linear over a deflection range of not less than 50 percent above the specified deflection. The ratio of lateral to vertical stiffness shall be not less than 0.8. The designed deflection of each spring must be at least 75% of specified deflection.

5) Where called for in the specifications or on the drawings, all structural steel bases supporting vibration isolated equipment, including concrete filled inertia bases, shall be designed and fabricated by the vibration isolation manufacturer.

6) Unless otherwise indicated, all equipment mounted on vibration isolated bases shall have a minimum operating clearance of 2” between the base and floor or support beneath.

1.04 Submittals
   1) Submittals that document that the specific vibration isolators utilized are in compliance with the specifications. Submittals shall include all information required per Section 1.03.

   2) Submittal Drawings shall include the following:
      A. Vibration Isolation Bases: Dimensional drawings, including member sizes, attachments to isolators and supported equipment. Include auxiliary motor slide bases and rails, base weights, concrete weights, equipment static loads, support points and vibration isolators.
      B. Detailed layout of the isolator orientation.

1.05 Coordination
   1) Contractor shall coordinate size of all housekeeping pads supporting equipment with the vibration isolation manufacturer.

   2) Contractor shall coordinate with vibration isolation manufacturer, equipment manufacturer and structural engineer to locate and size structural supports underneath equipment (e.g. roof curbs, cooling towers and other similar equipment).
1.06 System Design

1) Vibration isolation manufacturer shall be responsible for the selection of the attachment hardware as required to attach vibration isolators to both the equipment and supporting structure. Caution shall be taken regarding anchorage in wind and seismic areas as required. Refer to VISCMA Document 101-07 for seismic anchorage.

2) The contractor shall furnish to the vibration isolation manufacturer a complete set of approved shop drawings of all equipment which is to be isolated. From these drawings the selection and design of isolation devices and/or attachment hardware will be completed. The shop drawings furnished shall include, at a minimum, basic equipment layout, length and width dimensions, and installed operating weights of the equipment to be vibration isolated.

1.07 Installation

Vibration isolation materials specified herein shall be installed following the manufacturer’s written instructions. Installation instructions shall be submitted to the engineer of record for approval prior to the beginning of the work.

2.0 Materials

2.01 Source of Materials

1) The materials and systems specified in this section should be purchased from a VISCMA member to assure professional responsibility for the performance of the vibration isolators. See Appendix A or www.viscma.com for a list of current members.

2) Materials and systems specified herein and detailed or scheduled on the drawings are not specific to any one VISCMA member. Materials and systems provided must meet all requirements as listed in this specification.

2.02 Factory Finishes

All steel components shall be cleaned of welding slag and coated with an approved primer. All steel components (excluding springs) on projects exposed to the weather, shall be hot dip galvanized or powder coated. Springs shall be cadmium or zinc plated, powder-coated, epoxy or PVC finished.

2.03 Vibration Isolation Types

Vibration Isolators contained herein are per Table 48, Sound and Vibration Control Chapter 47 of the 2007 ASHRAE Handbook HVAC Applications.
See Appendix A for manufacturers’ model designations.

1) **Type 1: Elastomeric/ Fiber Glass Pads**  
   A. Elastomeric isolators are available in pads and molded configuration.
   
   B. Pads are used in single and multiple layers. When using multiple layers, use a bonded, galvanized sheet metal separation plate between each layer.
   
   C. A load distribution plate may be required to evenly distribute the load over the surface of the pad.

2) **Type 2: Elastomeric Mounts**  
   A. Vibration Isolators shall be elastomeric, molded from oil, ozone and oxidant resistant compounds, designed to operate within the strain limits of the material.
   
   B. Isolators shall include encapsulated load transfer plate for bolting to equipment and a base plate with anchor holes for bolting to the supporting structure.

3) **Type 3: Steel Spring Isolators**  
   A. Freestanding and laterally stable spring assembly without a housing, complete with elastomeric acoustical friction pads.
   
   B. Provide leveling device rigidly connected to the equipment or frame above.

4) **Type 4: Restrained Spring Isolators**  
   A. Spring Isolator equipped with a restrained steel housing to prevent the equipment’s operating height from changing should it be necessary to temporarily remove a portion of its weight.
   
   B. The housing will also function as rigid blocking during rigging so that the installed height and the operating height of the isolated equipment remains the same.
   
   C. Isolator top shall have adequate means for fastening to the equipment, and baseplate shall have adequate means for fastening to the supporting structure, when the equipment is subject to wind loading.

5) **Type H1: Elastomeric Hanger**  
   A. An elastomeric isolation element contained in a steel hanger housing.
B. The elastomeric element/hanger shall be shaped to prevent the rod from contacting the housing and thereby short-circuiting the isolation.

C. A steel load-distribution plate shall be incorporated/furnished sandwiching the elastomeric element to the hanger housing.

6) **Type H2: Spring Hanger**
   A. A stable steel spring contained in a steel hanger housing, with an integral elastomeric element to prevent metal to metal contact.
   
   B. The bottom hole must be large enough to allow a +/- 15 degree (30 degree total) rod misalignment.

7) **Type H3: Combination Elastomeric/Spring Hanger**
   A. A stable steel spring contained in a steel hanger housing.
   
   B. An elastomeric element is added in series to isolate the upper connection of the hanger box to the structure.
   
   C. The bottom hole must be large enough to allow a +/- 15 degree (30 degree total) rod misalignment.

8) **Type 5: Thrust Restraints**
   A. Type H2 Spring Hangers installed in pairs to resist the thrust caused by air pressure.

2.04 **Equipment Support Base Types**

   Equipment Support Bases contained herein are per Table 48, Sound and Vibration Control Chapter 47 of the 2007 ASHRAE Handbook HVAC Applications. See Appendix A for manufacturers’ model designations.

1) **Type B: Structural Bases**
   A. Engineered steel frames manufactured from structural steel shapes with welded height-saving brackets as required for side mounting of the isolators.
   
   B. Frames may be square, rectangular or T-shaped.
   
   A. Adjustable motor slide bases shall be included when required for centrifugal fan applications.

2) **Type C: Concrete Inertia Bases**
A. Engineered steel forms with integrated isolator brackets.

B. Bases shall be shipped ready to be filled with concrete on job site by the contractor.

C. Bases shall include welded or tied reinforcing bars running both ways in a single layer.

D. The bases shall include a template and fastening devices for the equipment.

E. Weight of concrete and frame shall not be less than the weight of the equipment it supports.

F. Depth of the inertia base shall be at least six inches.

G. The inertia base shall be sized to accommodate the elbow support(s).

H. Adjustable motor slide bases shall be included when required for centrifugal fan applications.

3) **Type D-1: Curb Isolation Rails**
   
   A. Vibration isolation curb element inserted between rooftop equipment and existing roof curbs. It shall be of aluminum or steel construction and shall be attached to the equipment as specified by the curb isolation manufacturer.

   B. Incorporated vibration isolators shall meet the specific characteristics described in Section 1.03.

   C. Components exposed to the weather shall be galvanized or manufactured out of corrosion resistant materials.

   D. Contractor is responsible for proper attachment of curb isolation to the existing curb.

   E. Contractor is responsible for verifying the adequacy of the existing curb and its anchorage to the roof structure.

4) **Type D-2: Vibration Isolated Roof Curbs**
   
   A. Curbs used to attach rooftop equipment to the structure shall be of aluminum or steel construction and shall be attached to the equipment as specified by the curb manufacturer.

   B. Incorporated vibration isolators shall meet the specific characteristics described in Section 1.03.
C. Components exposed to the weather shall be galvanized or manufactured out of corrosion resistant materials.

D. Contractor is responsible for proper attachment of rooftop curb to building structure.

E. Contractor is responsible for coordinating the location of adequate structural support for the rooftop curb with the general contractor.

3.0 Installation, Execution and Inspection

3.01 Installation
1) Installation of all vibration isolation materials specified in this section shall be as per the manufacturer’s written instructions. Vibration isolators must not be installed in a manner that will result in piping stress or misalignment.

2) Upon completion of installation of all equipment and vibration isolation materials and before adjusting the isolators, all debris shall be cleaned from beneath the isolated equipment, to avoid the possibility of short-circuiting the isolation system.

3) The contractor shall notify the local representative of the vibration isolation manufacturer prior to installing any vibration isolation devices. The contractor shall seek the representative’s guidance in any installation procedures with which he is unfamiliar.

3.02 Inspection
1) Upon completion of the installation of all vibration isolation devices herein specified, the local representative of the vibration isolation manufacturer shall, at the contractor’s request, inspect the completed system and report in writing any installation errors or other fault in the system which could affect the performance of the system.

2) The installing contractor shall submit a report upon request to the building architect and/or engineer, including the manufacturer’s representative’s final report, indicating that all vibration isolation material has been properly installed, or steps that are to be taken by the contractor to properly complete the vibration isolation work as per the specifications.
4.0 DISCLAIMER

These Specification Guidelines have been developed based on current, generally accepted engineering practice and past experience representing a consensus opinion of the VISCMA member companies. They are based on engineering principals believed to be sound and industry accepted safety factors.

VISCMA MAKES NO WARRANTIES WHATSOEVER IN CONNECTION WITH THESE SPECIFICATION GUIDELINES (INCLUDING WITH RESPECT TO MANUFACTURERS AND PRODUCTS LISTED ON APPENDIX A HEREOF) AND HEREBY EXPRESSLY DISCLAIMS ALL WARRANTIES (WHETHER EXPRESS, IMPLIED OR STATUTORY), INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THIS DISCLAIMER BY VISCMA IN NO WAY AFFECTS THE TERMS OF THE MANUFACTURERS’ WARRANTIES, IF ANY.

IN NO EVENT SHALL THE VISCMA BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, INCLUDING LOST PROFITS, ARISING OUT OF THE USE OR THE INABILITY TO USE THESE SPECIFICATION GUIDELINES AND/OR ANY ACT OR FAILURE TO ACT WITH RESPECT TO THE CREATION, DESIGN, MANUFACTURE, ERECTION, INSTALLATION, PREPARATION, SALE, OR DELIVERY OF ANY ITEM COVERED BY THESE SPECIFICATION GUIDELINES, INCLUDING, BUT NOT LIMITED TO, THE PRODUCTS LISTED ON APPENDIX A HERETO, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, EVEN IF VISCMA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

In jurisdictions that do not allow some or all of the above limitations on liability, liability shall be limited to the greatest extent allowed by law.
## Appendix A.
### Vibration Isolation Type and Manufacturer

<table>
<thead>
<tr>
<th>Vibration Isolation Type</th>
<th>Product Description</th>
<th>Product Manufacturer</th>
<th>VISCMA Member Model(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> Elastomeric / Fiberglass Pads</td>
<td>CalDyn/California Dynamics</td>
<td>RP ECPR VT FP EP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kinetics Noise Control, Inc., Inc.</td>
<td>KIP/RSP/NPS/NGS/ NPD/NGD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.W. Saussé &amp; Co., Inc.</td>
<td>R/RP/IC/ICP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mason Industries, Inc.</td>
<td>W/SUPRR W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thybar Corporation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOLCO</td>
<td>RP ECPR VT FP EP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vibration Eliminator Co., Inc.</td>
<td>100N/200N/400N (NP)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vibro-Acoustics</td>
<td>N/NS/NSN/NSNS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The VMC Group</td>
<td>MAXIFLEX/NRC/ SHEARFLEX/NR FABRIFLEX/NDB</td>
<td></td>
</tr>
<tr>
<td><strong>2</strong> Elastomeric Mounts</td>
<td>CalDyn/California Dynamics</td>
<td>RM-D JQTQN</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kinetics Noise Control, Inc.</td>
<td>KLM/RDA/RDB/RDC/ RDD/RQ/AC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.W. Saussé &amp; Co., Inc.</td>
<td>SD/DD/FU/FUD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mason Industries, Inc.</td>
<td>BRA/BRB/BR/C/BRD RAA, RBA, RCA, RDA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thybar Corporation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOLCO</td>
<td>RM-D JQTQN</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vibration Eliminator Co., Inc.</td>
<td>T44/D44/T54/3865 (TD)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vibro-Acoustics</td>
<td>R/RD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The VMC Group</td>
<td>RSM/RDC/MB R/RD/RVD</td>
<td></td>
</tr>
<tr>
<td><strong>3</strong> Steel Spring Isolators</td>
<td>CalDyn/California Dynamics</td>
<td>SSL SSK</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kinetics Noise Control, Inc.</td>
<td>FDS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.W. Saussé &amp; Co., Inc.</td>
<td>RMS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mason Industries, Inc.</td>
<td>SL F</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thybar Corporation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOLCO</td>
<td>SSL SSK</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vibration Eliminator Co., Inc.</td>
<td>OST</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vibro-Acoustics</td>
<td>FS/FST/SFS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The VMC Group</td>
<td>A-SERIES/SW/AW</td>
<td></td>
</tr>
<tr>
<td><strong>4</strong> Restrained Spring Isolators</td>
<td>CalDyn/California Dynamics</td>
<td>JQ OS DLK RJJEQ GENX</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kinetics Noise Control, Inc.</td>
<td>FLS/FLSS/FTS/FRS/ FHS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.W. Saussé &amp; Co., Inc.</td>
<td>RMU/RMLS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mason Industries, Inc.</td>
<td>SLR/SLRS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thybar Corporation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOLCO</td>
<td>JQ OS DLK RJJEQ GENX</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vibration Eliminator Co., Inc.</td>
<td>KW</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vibro-Acoustics</td>
<td>CSR/SCSR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The VMC Group</td>
<td>MS/MSS/AWRS/M SW/SLR/AMSR/AEQM/ ASCM</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
</tbody>
</table>
| H1 | Elastomeric Hangers | CalDyn/California Dynamics  
Kinetics Noise Control, Inc.  
M.W. Saussé & Co., Inc.  
Mason Industries, Inc.  
Thybar Corporation  
TOLCO  
Vibration Eliminator Co., Inc.  
Vibro-Acoustics  
The VMC Group | RH  
RH-D  
RH/FH/AF/AR  
HS/HSSJ  
HD/CRCH  
RH RH-D  
1C/3C/3CTD  
RH/RHD/NH  
HR/RH/BRD/HRD |
| H2 | Spring Hangers | CalDyn/California Dynamics  
Kinetics Noise Control, Inc.  
M.W. Saussé & Co., Inc.  
Mason Industries, Inc.  
Thybar Corporation  
TOLCO  
Vibration Eliminator Co., Inc.  
Vibro-Acoustics  
The VMC Group | CH/30  
SH/SPH  
RMXA/RMXA-1C  
30/CSCCH  
506 - CH/30  
SNC  
SH/SHC  
HSA  
SH/BSA |
| H3 | Combined Elastomeric/Spring Hangers | CalDyn/California Dynamics  
Kinetics Noise Control, Inc.  
M.W. Saussé & Co., Inc.  
Mason Industries, Inc.  
Thybar Corporation  
TOLCO  
Vibration Eliminator Co., Inc.  
Vibro-Acoustics  
The VMC Group | HH/30  
SFH/SRH/ARS/SHAA/SHAB/SRHL/SFPH/SRPB  
HXA/HMXA  
30N  
506 – HH/30  
SNRC  
SHR  
HRSA  
RSH-30A/BSRA |
<table>
<thead>
<tr>
<th>Equipment Support Base Type</th>
<th>Product Description</th>
<th>Product Manufacturer</th>
<th>VISCMA Member Model(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Structural Bases</td>
<td>CalDyn/California Dynamics</td>
<td>WW SW XW</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kinetics Noise Control, Inc.</td>
<td>SFB-W/SFB-C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.W. Saussé &amp; Co., Inc.</td>
<td>RMSB/RMLSB/RMLSB-SB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mason Industries, Inc.</td>
<td>MSL/WFSL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thybar Corporation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TOLCO</td>
<td>WW SW XW</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vibration Eliminator Co., Inc.</td>
<td>UN-OST/UN-KW</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vibro-Acoustics</td>
<td>BASE/S</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The VMC Group</td>
<td>SFB/WFB/WX/WSB</td>
</tr>
<tr>
<td>C</td>
<td>Concrete Inertia Bases</td>
<td>CalDyn/California Dynamics</td>
<td>CW</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kinetics Noise Control, Inc.</td>
<td>CIB-L/CIB-H</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.W. Saussé &amp; Co., Inc.</td>
<td>RMSBI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mason Industries, Inc.</td>
<td>BMK/KSL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thybar Corporation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TOLCO</td>
<td>CW</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vibration Eliminator Co., Inc.</td>
<td>OST/KW Frames</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vibro-Acoustics</td>
<td>BASE/CIB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The VMC Group</td>
<td>MPF/CPF/WPF</td>
</tr>
<tr>
<td>D-1</td>
<td>Curb Isolation Rails</td>
<td>CalDyn/California Dynamics</td>
<td>JQ</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kinetics Noise Control, Inc.</td>
<td>KSR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.W. Saussé &amp; Co., Inc.</td>
<td>RMU-BRT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mason Industries, Inc.</td>
<td>CMAB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thybar Corporation</td>
<td>Vibro-Mate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TOLCO</td>
<td>JQ</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vibration Eliminator Co., Inc.</td>
<td>‘AR’ Bases</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vibro-Acoustics</td>
<td>RTR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The VMC Group</td>
<td>RTIR</td>
</tr>
<tr>
<td>D-2</td>
<td>Roof Curbs (Isolated)</td>
<td>CalDyn/California Dynamics</td>
<td>MW YW</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kinetics Noise Control, Inc.</td>
<td>KSCR/ESR/KineticsCurb</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.W. Saussé &amp; Co., Inc.</td>
<td>VIC/VIC-SS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mason Industries, Inc.</td>
<td>RSC/ISC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thybar Corporation</td>
<td>Vibro-Curb</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TOLCO</td>
<td>MW YW</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vibration Eliminator Co., Inc.</td>
<td>VERC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vibro-Acoustics</td>
<td>VCR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The VMC Group</td>
<td>P-6100/P-6200/P-6300</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>P-7100/P-7200/P-7300</td>
</tr>
</tbody>
</table>
THIS GUIDELINE WAS DEVELOPED BY THE MEMBERS OF

MEMBERS

Kinetics Noise Control, Inc.
P.O Box 655
6300 Irelan Place
Dublin, OH 43017-0655
(614) 889-0480
Fax: (614) 889-0540
Web Site: www.kineticsnoise.com

Mason Industries, Inc.
P.O. Box 410
Smithtown, NY 11787
(631) 348-0282
Fax: (631) 348-0279
Web Site: www.mason-ind.com

M.W. Saussé & Co., Inc.
28805 Industry Drive
Valencia, CA 91355-5419
(661) 257-3311
Fax: (661) 257-7673
Web Site: www.vibrex.net

Thybar Corporation
913 South Kay Avenue
Addison, IL 60101
(630) 543-5300
Fax: (630) 543-5309
Web Site: www.thybar.com

Vibration Eliminator Company, Inc.
15 Dixon Avenue
Copique, NY 11726
(631) 841-4000
Fax: (631) 841-0020
Web Site: www.veco-ny.com

Vibro-Acoustics
727 Tapscott Road
Scarborough, ON M1X 1A2
(416) 291-7371
Fax: (416) 291-8049
Web Site: www.vibro-acoustics.com

The VMC Group
113 Main Street
Bloomingdale, NJ 07403
(973) 838-1780
Fax: (973) 492-8430
Web Site: www.thevmcgroup.com

ASSOCIATE MEMBERS

CalDyn/California Dynamics
5572 Alhambra Avenue
Los Angeles, CA 90032-3106
323-223-3882
FAX: 323-223-7941
Web Site: www.caldyn.com

TOLCO
1375 Sampson Avenue
Corona, CA 92879
(951) 737-5599
Fax: (951) 737-0330
Web Site: www.tolco.com