Kinetics Acoustical Curtain Systems

Kinetics Noise Control’s acoustical curtain systems are custom engineered to your application for acoustic performance and structural integrity. A cost effective solution to reduce unwanted noise, acoustical curtain systems are available as both barrier walls and complete enclosures. All systems are designed and manufactured to meet OSHA and customer requirements regarding noise reduction, maintenance access and ventilation to remove unwanted heat build-up. Options include view ports, ventilation silencers, acoustic louvers, and rigid roof panels.

Common applications are encountered in industrial and commercial facilities. OEM customers incorporate acoustical curtain systems in either roll form, die-cut or custom system formats. The acoustical curtain systems can be designed for noise reduction up to 25 dBA dependent upon the noise source sound spectrum shape (low, mid, high frequency or a combination).

Typical Applications:

- Fans, Pumps, Compressors (floor or skid mounted)
- Plant and Facility Dividers (fixed or movable)
- Portable, roll-away barriers/screens
- Temporary construction areas
- Manufacturing processes
- Dust collection systems
- Process machinery
- In-plant offices
- Generators
- Blowers
- Chillers
- Pumps
Advantages of Kinetics Acoustical Curtain Systems

- Multitude of designs to meet every application
- Each system is custom-engineered by Kinetics engineering team providing optimal noise reduction, structural integrity all economically
- Designs consider maintenance access, view ports, required passive/active silenced ventilation plus easily pared with many other Kinetics manufactured acoustic products, (rigid roof panels, acoustic louvers, silencers, etc.)
- Every system is designed for easy installation, relocation and modification
- Systems are supplied with project specific, AutoCAD submittals, details and piece-marked installation drawings
- Curtain panels and track are all factory cut-to-size and tagged for easy, quick and cost effective installation
- Product performance is backed by independent testing in a NVLAP accredited laboratory per ASTM E90 (transmission loss) and ASTM C423 (sound absorption)
- Products meet ASTM E84, Class A fire rating
- Exhibit extremely long service life
- Excellent resistance to oil and chemicals.
- Easily cleanable
Acoustical Curtain Composite Panel Data

Composite panels are highly effective at reducing sound because they both block and absorb noise. The following tables provide comparisons between our most popular models of composite curtains and acoustical performances demonstrated by those models.

Absorption Characteristics

<table>
<thead>
<tr>
<th>Product</th>
<th>Frequency (Hz)</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1K</th>
<th>2K</th>
<th>4K</th>
<th>NRC*</th>
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</thead>
<tbody>
<tr>
<td>Q1 - 1&quot; Quilt</td>
<td>4K</td>
<td>0.62</td>
<td>1.04</td>
<td>1.10</td>
<td>1.10</td>
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<tr>
<td>Q2 - 2&quot; Quilt</td>
<td>2K</td>
<td>0.64</td>
<td>1.04</td>
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<td>1.10</td>
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<tr>
<td>Q4 - 4&quot; Quilt</td>
<td>1K</td>
<td>0.84</td>
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*Per ASTM C423, Standard Method of Test for Sound Absorption of Acoustic Materials in Reverberant Rooms

Standard Transmission Loss (dB)

<table>
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<tr>
<th>Product</th>
<th>Weights</th>
<th>Frequency (Hz)</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1K</th>
<th>2K</th>
<th>4K</th>
<th>STC*</th>
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<tr>
<td>KNC-50RB</td>
<td>0.5</td>
<td>lb/ft²</td>
<td>12</td>
<td>13</td>
<td>16</td>
<td>21</td>
<td>27</td>
<td>32</td>
<td>21</td>
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<tr>
<td>KNC-100RB</td>
<td>1.0</td>
<td>2.44 kg/m²</td>
<td>13</td>
<td>17</td>
<td>21</td>
<td>28</td>
<td>33</td>
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<tr>
<td>KNC-50RBQ</td>
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<td>3.4</td>
<td>6</td>
<td>12</td>
<td>17</td>
<td>27</td>
<td>38</td>
<td>46</td>
<td>23</td>
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<td>6.4</td>
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<td>KNC-50BQQ</td>
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<td>4.9</td>
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<td>12</td>
<td>18</td>
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<td>46</td>
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*Per ASTM E90, Standard Recommended Practice for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions

The internal layers of our KNC-100BQQ curtain
Floor Mounted
The most common curtain application is mounting to the floor. Hardware is provided to support the track from the floor using columns and base plates.

Ceiling Suspended
Ceiling suspended systems are specified when access to the structure is limited. Threaded rod can be secured to these supports for curtain suspension.
Heavy Duty

Heavy duty floor mounted hardware is used to support large systems. Structural steel will be used when the application involves a significant amount of weight. Kinetics engineers design the structure from the base plate and upwards.

Wall Mounted

Wall mounted hardware is used when the track system is running adjacent to a wall. The wall mount down option is used to mount track at ceiling level. The wall mount up option is used to mount track above door openings.
Ceiling Mounted

When the structure is accessible, curtain systems can be directly mounted to the ceiling or beam. Ceiling mounted hardware comes equipped with mounting holes for easy and quick attachment.

Standard Components

Typical components used on all systems.
Engineering, Manufacturing, Care and Quality

Kinetics Noise Control, Inc. has extensive experience designing and manufacturing innovative products to control noise and vibration. Established in 1958 as industrial consultants focused on the control of sound and vibration, Kinetics now produces the industry’s largest selection of innovative products and solutions to control airborne noise, isolate structure-borne vibration, enhance room acoustics, create quiet spaces, and restrain non-structural building systems. Kinetics features an experienced staff of professional engineers, customer support, and sales representatives worldwide who are ready to work with you. Kinetics has facilities in Ohio, California, Ontario, and Hong Kong.

You’ll find the largest selection of standard and custom designed industrial noise and vibration control products in the world at Kinetics Noise Control, Inc. Let us help you hear the difference.