NOISE CONTROL RESILIENT CEILING

KSCH HANGER

Patent No. 7,028,432

INSTALLATION GUIDELINES

IMPORTANT! PLEASE READ FIRST:

These suggested selection guidelines represent generally accepted procedures for
properly selecting Kinetics Noise Control KSCH for ceiling system isolation. These
suggestions may be followed, modified, or rejected by the owner, engineer, contractor,
and/or their respective representative(s) since they, not Kinetics Noise Control, are
responsible for planning and executing procedures appropriate to a specific application.
Kinetics Noise Control reserves the right to alter these suggestions and encourages
contact with the factory or its representatives to review any possible modification to
these suggested guidelines prior to commencing selection. Note that installation
guidelines are intended for basic drywall ceilings only, when hanging MEP or
other equipment other than lightweight lighting fixtures or lay-in tile, contact your
local Kinetics representative for assistance.

1. Installation of an isolated ceiling system that uses Kinetics Noise Control KSCH
Ceiling Hangers requires the following materials (as specified by others and purchased
separately):

   A. 1-1/2" x 1/2", 16-gage cold-rolled channel.
   B. 7/8" 20- to 25-gage drywall furring channel.
   C. Anchors for mounting into non-isolated ceiling substrate -OR-
      a. 1-5/8" Unistrut® channel (optional)
   D. 1/2" or 5/8" thick gypsum board (Type X).
   E. Appropriate tools and equipment for installation.

   Please note: If submittal drawings have been prepared for the installation, review
drawings for completeness and accuracy; otherwise, refer to Selection Guidelines for
selecting ceiling hangers.

2. Mark grid pattern on existing non-isolated ceiling using the following spacing criteria:

   A. Isolators installed at the perimeter must be located not more than 16" from
      the edge of the isolated ceiling; maintain at least a three-inch clearance from
      the perimeter.
   B. Isolators may be located up to 48" along the perimeter of the isolated ceiling.
   C. Isolators mounted mid-room (i.e., those isolators not at the perimeter) may
      be located up to 48" on center each way (o.c.e.w).

   Please note: Lay-out drawings, if provided, override general location guidelines
   provided above.
3. Remove Model KSCH Ceiling Hangers from box. **Do not disassemble mounting bracket from unit for installation purposes.** Confirm capacity of isolator to ensure proper location in grid (see chart). If provided, lay-out drawings will identify location of specific hanger by capacity rating. Slide cold-rolled channel through the channel carrier of the isolator or through the channel carrier of the optional APB bracket. After determining the direction the cold-roll channel will run, locate the isolators (use the locating notches) or optional Unistrut® at the intersect points on the grid. Anchor isolators to non-isolated ceiling using appropriate fastener at minimum of two (2) locations through the mounting bracket. If using optional APB bracket, thread into the mounted KSCH hanger. Position the cold-rolled channel to prevent contact at partition/wall/column or any other non-isolated structural component. Inter-connect ends of cold-rolled channel using appropriate practices for ceiling grid installation.

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Outer Spring</th>
<th>Inner Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Gray</td>
<td>-</td>
</tr>
<tr>
<td>35</td>
<td>Blue</td>
<td>-</td>
</tr>
<tr>
<td>48</td>
<td>Black</td>
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<tr>
<td>73</td>
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<td>Silver</td>
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<tr>
<td>90</td>
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<tr>
<td>120</td>
<td>Orange</td>
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<tr>
<td>140</td>
<td>Brown</td>
<td>Silver</td>
</tr>
<tr>
<td>172</td>
<td>Red</td>
<td>-</td>
</tr>
<tr>
<td>223</td>
<td>Red</td>
<td>Silver</td>
</tr>
</tbody>
</table>

4. Attach drywall furring channel to cold-rolled steel and interconnect the ends of the furring channel using appropriate practices for ceiling grid installation. Furring channel cannot contact non-isolated structural components. Make certain cold-rolled channel is resting on the bottom of the channel carrier bracket and not contacting the mounting bracket.

5. After assembling the ceiling grid, check for levelness. By loosening or tightening the nuts on the leveling bolts, the grid adjusts up to 1/4”. Shim between the decking and mounting bracket if additional adjustment is required (this may require removal of some of the isolators). Do not bend or twist mounting bracket when shimming and leveling isolator.

6. Install CPT ceiling perimeter tape at partitions/walls, columns, and around any non-isolated building components to create a 1/4” wide resilient layer that ensures the isolated ceiling remains decoupled from the non-isolated structure. As the gypsum board is attached to the grid, the springs will compress (up to 5/8”) allowing the ceiling system to lower into final position. Position CPT to account for this change to final elevation. If an alternate method for ensuring that the isolated ceiling remains decoupled is employed (e.g., using resilient backer rod), be sure to maintain a 1/4” gap from non-isolated structural components.

7. Install the gypsum board using accepted practices for attaching to the grid system. Be certain to maintain a 1/4” gap between non-isolated structural components and the isolated ceiling to ensure that the gypsum board does not contact any non-isolated structural components. Do not allow gypsum board to rest on top edge of CPT; it should abut the perimeter tape. Do not allow CPT to become compressed against the
non-isolated structure. In some cases, additional adjustment of the gypsum board may be necessary to achieve levelness; consult factory for procedures.

8. Caulk gap using a resilient, non-hardening caulk.