# Wire Comparison Chart

## Breaking Strength and Technical Data
Galvanized, Stainless Steel, and Monel Wires
Soft Annealed

<table>
<thead>
<tr>
<th>ASWG</th>
<th>Diameter (inches)</th>
<th>Feet per Pound</th>
<th>Approximate Breaking Strength (pounds without safety factor)*</th>
<th>Approximate Number of Pieces per 50-lb. x 12' bundle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Steel</td>
<td>Monel 400</td>
</tr>
<tr>
<td>-</td>
<td>0.250</td>
<td></td>
<td></td>
<td>6.0</td>
</tr>
<tr>
<td>8</td>
<td>0.1875</td>
<td></td>
<td>10.6</td>
<td>9.7</td>
</tr>
<tr>
<td>9</td>
<td>0.162</td>
<td></td>
<td>14.3</td>
<td>12.6</td>
</tr>
<tr>
<td>10</td>
<td>0.148</td>
<td></td>
<td>17.1</td>
<td>15.2</td>
</tr>
<tr>
<td>-</td>
<td>0.135</td>
<td></td>
<td>20.6</td>
<td>18.6</td>
</tr>
<tr>
<td>12</td>
<td>0.125</td>
<td></td>
<td>24.0</td>
<td>21.3</td>
</tr>
<tr>
<td>14</td>
<td>0.105</td>
<td></td>
<td>33.7</td>
<td>28.9</td>
</tr>
<tr>
<td>16</td>
<td>0.080</td>
<td></td>
<td>58.6</td>
<td>51.5</td>
</tr>
<tr>
<td>18</td>
<td>0.062</td>
<td></td>
<td>96.0</td>
<td>86.4</td>
</tr>
</tbody>
</table>

*Recommended Safety Factor: 1/4

Please call for current prices

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  - Truly soft and clean
  - GALVANIZED – STAINLESS STEEL
  - MONEL – ALUMINUM
  - Straightened & cut; coils
  - Standard and custom lengths available

- **COLD ROLLED CHANNELS**
  - Galvanized
  - 3/4" - 1-1/2" - 2"

- **STRUCTURAL STEEL STUDS**
  - 12 through 20 gauge

- **CURVED CHANNELS & SHAPES**

- **ISOLATION CEILING HANGERS**
  - For all architectural specs.

- **TENSION PINS & HARDENED NAILS**

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Hung ceilings, because of the nature of their construction, tend to act as sounding boards and amplify the noises and vibrations that are transmitted down from the building structure through the suspension wires. Just the opposite is the situation with air ducts and piping in that vibration from air handling units and pumps are transmitted to the building structure. In order to reduce these effects, a completely resilient material must be interposed in the system.

The ‘ARH-1’ Hanger Is Designed to Serve This Purpose

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E-mail: sales@ldpeters.com
ARH-1

SELECTING THE CORRECT HANGER SIZE

Maximum Recommended Steady Load*

Static Deflection at Maximum Load

Hanger Model Number

Color Code Identification

:* NOTE:
This is not the hanger failure point but the maximum actual steady load we recommend. All hanger sizes have been tested to more than 750 pounds with no sign of fracture.

<table>
<thead>
<tr>
<th>Load In Pounds</th>
<th>Static Deflection In Inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARH-1-20</td>
<td>0.10</td>
</tr>
<tr>
<td>ARH-1-40</td>
<td>0.15</td>
</tr>
<tr>
<td>ARH-1-70</td>
<td>0.20</td>
</tr>
</tbody>
</table>

SUGGESTED SPECIFICATIONS

Isolation hangers shall be incorporated, in series, into the suspension system at all points of support. The isolation medium shall be high tensile gum rubber, to assure resilience, with an anti-ozonant added, to assure long life. The metal structural portion of the hanger shall be 11 gage zinc coated steel wire forms interlocked through holes in zinc coated steel pressure plates and swaged in place to provide failsafe construction. Rubber collars shall be provided at the points where the wire forms pass through the pressure plates to prevent metal-to-metal contact. Hangers shall be type ARH-1 supplied by:

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INSIDE THE ARH-1 HANGER

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3. 11 GAGE COLD DRAWN STEEL WIRE.

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The choice of vibration isolators must take many factors into consideration. Some of them are the vibration disturbing frequency and amplitude, the mass of the suspended system, the isolator static deflection and effective spring rate and the criticality of the location. There are many fine independent acoustical consultants who, with the help of specialized equipment, are able to pinpoint exactly what is required to solve any specific problem.

One of the most important factors when determining the efficiency of a system is the static deflection of the isolators. The static deflection is how much the isolators compress under the weight of the equipment. The greater the static deflection, the greater the isolation efficiency (see the chart below). It is therefore very important to choose isolators that will provide the maximum static deflection for the load to be supported. Choosing isolators for a much greater load to be “safe” will result in a less efficient system. The maximum recommended steady loads shown are not failure points, but represent loads that, when exceeded for long periods of time, may cause the isolator to take a “permanent set” thereby reducing the efficiency of the system.
METHODS OF INSTALLATION

- WIRE
- MACHINE SCREW, NUT OR SHEET METAL SCREW
- STRAP OR DUCT
- "POP" RIVET
- WOOD BEAM
- COMMON NAIL
- RIVET
- SHEET METAL SCREW OR RIVET
- 3/16 DIA. PIN
- BUILDING STRUCTURE OR EQUIPMENT FRAME
- THREADED ROD
- Furring Channel
TYPICAL INSTALLATIONS

100% AMERICAN MADE

HOT OR COLD AIR DUCT

"ARH-1 HANGER NAILED DIRECTLY TO WOODEN JOISTS
TURNBUCKLE USED TO PROVIDE LEVEL CONTROL

"ARH-1 HANGER SUPPORTING AN AIR HANDLING UNIT

"ARH-1 HANGER USED AS A PIPE HANGER

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