Installation Instructions

Hangers for 1-5/8" Rigid Transmission Line

The hangers are designed to mount 1-5/8" rigid transmission line on a steel tower or other support structure and to accommodate the differential expansion and contraction between the line and the tower.

**Type 13924 Rigid Hanger** is used to anchor the transmission line in a spring-suspended system to the top of the tower. Two rigid hangers are needed, at the top, if the vertical transmission line run is more than 300 ft (91 m).

**Type 14378 Sliding Hanger** prevents lateral motion of the transmission line. Sliding hangers should be used at 10-ft (3 m) intervals along the vertical and horizontal transmission line runs. Type 14442 Sliding Hanger includes an insulator for isolating the line from the tower when the line feeds an antenna mounted on an AM broadcast tower.

**Type 14379 Spring Hanger** is used to support the weight and accommodate the differential expansion and contraction. Spring hangers should be used at 50-foot (15 m) intervals. On towers less than 50 feet high, a spring hanger should be used at the bottom of the vertical run; for more than 500 feet (152 m), a special type spring hanger is required. Type 14441 Spring Hanger includes an insulator for line isolation.

### Spring Settings

<table>
<thead>
<tr>
<th>Temperature, °F</th>
<th>-50</th>
<th>-25</th>
<th>0</th>
<th>25</th>
<th>50</th>
<th>75</th>
<th>100</th>
<th>150</th>
<th>152</th>
<th>150</th>
</tr>
</thead>
<tbody>
<tr>
<td>(°C)</td>
<td>-46</td>
<td>-32</td>
<td>-18</td>
<td>-4</td>
<td>10</td>
<td>24</td>
<td>38</td>
<td>52</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>Dimension L, in</td>
<td>8-9/16</td>
<td>8-3/8</td>
<td>8-1/8</td>
<td>7-5/16</td>
<td>7-3/4</td>
<td>7-9/16</td>
<td>7-3/8</td>
<td>7-1/8</td>
<td>6-15/16</td>
<td></td>
</tr>
<tr>
<td>(mm)</td>
<td>(217)</td>
<td>(213)</td>
<td>(206)</td>
<td>(202)</td>
<td>(197)</td>
<td>(192)</td>
<td>(187)</td>
<td>(181)</td>
<td>(176)</td>
<td></td>
</tr>
</tbody>
</table>
Read the Instructions Thoroughly Before Assembly

1. If tower or support member is drilled or punched at regular intervals with 9/16" (14 mm) holes for 1/2" (13 mm) diameter hanger bolts, hangers may be attached directly to the tower. If such holes are not provided and cannot be drilled, clamp adapters must be used. Type 13555A adapters are used for towers having angle or flat members up to 7/8 in (22 mm) thick. Types 13550, 13551-1, and 13551-2 adapters are used for towers having round members of 1 to 3 in (25 to 76 mm) diameters, 3 to 4-1/2 in (76 to 114 mm) diameters, and 4-1/2 to 6-1/2 in (114 to 165 mm) diameters, respectively.

⚠️ WARNING: Tower members should not be drilled without consent of manufacturer because of possible weakening of the structure.

2. Spring hangers should be set and wired in accordance with the setting chart. This operation should be done on ground and wires should not be removed until installation is completed. Settings have been calculated for mean temperature of 50°F (10°C). Since calculated differences in settings for hangers within given run are so small, all hangers within any one system may be used with same settings. To set hanger, wrap baling wire around bottom bolt and hanger bracket as shown in illustration.

3. When all spring hangers are wired to desired setting, begin assembly of transmission line and installation of hangers. Start with rigid hanger at top and work downward with sliding and spring hangers. Make certain to remove wires from spring hangers after installation is completed.