**STATE OF FLORIDA WELCOME CENTER**

**WIND AND HANGER BEAMS FOR OVERHEAD SIGNS**

**GENERAL NOTES**

1. Work this Index with Index 700-040 and 700-041.

2. The number and location of the Panel Splices are determined by the Sign Face supplier.

3. Spacing of Vertical Hangers:
   - **A.** Two Vertical Hangers = 21.0% L
   - **Three Vertical Hangers** = 33.0% L
   - **Four Vertical Hangers** = 46.0% L
   - **Five Vertical Hangers** = 59.0% L
   - **Six Vertical Hangers** = 72.0% L

4. Spacing of Wind Beams:
   - **Two Wind Beams** = 21.0% D
   - **Three Wind Beams** = 33.0% D
   - **Four Wind Beams** = 46.0% D
   - **Five Wind Beams** = 59.0% D
   - **Six Wind Beams** = 72.0% D

5. Shop Drawings:
   - A. Required for Sign Panels deeper than 10'-0" with a horizontal panel splice.
   - B. Splice must be located in between interior Zee Supports and only allowed on signs greater than 10'-0".

6. Materials:
   - **A.** Aluminum: b. Bars, and Extruded Shapes; ASTM B 221, Alloy 6061-T6 or Alloy 6351-T5
c. Structural Shapes; ASTM B606, Alloy 6061-T6
d. Flat, Wide, and HSS shapes; ASTM A490, ASTM F488, Alloy 2014-T4
   - **B.** Steel: a. U-Bolts; ASTM A449 or ASTM A193
b. Nuts; ASTM A563, 2 per leg
c. Washers; ASTM A578, Alloy 2024-T4

7. Coatings:
   - A. Aluminum Bolts, Nuts and Washers: AA6061
   - B. Galvanized Steel Bolts, Nuts and Washers; ASTM F2329

8. Wind Speed by county: see Index 715-010.

**Sign Panel Splice**

- **Detail "A"**

- **Detail "B"**

**Sign Face**

**Butt Together**

**Sign Panels**

**Panel Splice**

- **(0.125" Thick)**

**Alum. Backing Strip**

**Panel Splice**

- **Backing Strip**

**Wind Beam**

- **(Typ.)**

**With Washers And Nuts**

**Flat Head Machine Bolt**

- **Ø Aluminum**

**Pair Of**

- **(Typ.)**

**Washers & Nuts**

**Flat Head Machine Bolt**

- **(Typ.)**

**With Washers & Nuts**

**Flat Head Machine Bolt**

- **(Typ.)**

**With Washers & Nuts**

**Flat Head Machine Bolt**

- **(Typ.)**

**Wind Beam**

- **(See DETAIL "B")**

**Sign (Typ.)**

**Wind Beam (Typ.)**

**Vertical Hanger (Typ.)**

**Back Elevation**

**SIDE ELEVATION**

**TYPICAL SIGN FOR OVERHEAD TRUSS**

**WIND BEAM TABLE**

<table>
<thead>
<tr>
<th>Number of Horizontal Wind Beams Based on Sign Depth (D)</th>
<th>2 Beams</th>
<th>3 Beams</th>
<th>4 Beams</th>
<th>5 Beams</th>
<th>6 Beams</th>
</tr>
</thead>
<tbody>
<tr>
<td>D = 5&quot;</td>
<td>0.015&quot;</td>
<td>0.015&quot;</td>
<td>0.015&quot;</td>
<td>0.015&quot;</td>
<td>0.015&quot;</td>
</tr>
<tr>
<td>D = 6&quot;</td>
<td>0.015&quot;</td>
<td>0.015&quot;</td>
<td>0.015&quot;</td>
<td>0.015&quot;</td>
<td>0.015&quot;</td>
</tr>
<tr>
<td>D = 7&quot;</td>
<td>0.015&quot;</td>
<td>0.015&quot;</td>
<td>0.015&quot;</td>
<td>0.015&quot;</td>
<td>0.015&quot;</td>
</tr>
<tr>
<td>D = 8&quot;</td>
<td>0.015&quot;</td>
<td>0.015&quot;</td>
<td>0.015&quot;</td>
<td>0.015&quot;</td>
<td>0.015&quot;</td>
</tr>
</tbody>
</table>

**HANGER TABLE**

<table>
<thead>
<tr>
<th>Number of Vertical Hanger Beams Based on Wind Speed and Sign Length (L)</th>
<th>2 Hangers</th>
<th>3 Hangers</th>
<th>4 Hangers</th>
<th>5 Hangers</th>
<th>6 Hangers</th>
</tr>
</thead>
<tbody>
<tr>
<td>130 mph</td>
<td>1 = 18&quot;</td>
<td>1 = 18&quot;</td>
<td>20 = 18&quot;</td>
<td>20 = 18&quot;</td>
<td>20 = 18&quot;</td>
</tr>
<tr>
<td>150 mph</td>
<td>1 = 18&quot;</td>
<td>1 = 18&quot;</td>
<td>20 = 18&quot;</td>
<td>20 = 18&quot;</td>
<td>20 = 18&quot;</td>
</tr>
<tr>
<td>170 mph</td>
<td>1 = 18&quot;</td>
<td>1 = 18&quot;</td>
<td>20 = 18&quot;</td>
<td>20 = 18&quot;</td>
<td>20 = 18&quot;</td>
</tr>
</tbody>
</table>

**NOTE:** For Monroe County designs, use 170 mph values but with 2 x 3 1/2" x 6 19" vertical hanger beams only.