**ELEVATION**

**SECTION A-A**

*When "S" is less than 3 and the distance from the back of post is less than 24 (610), the post shall be steel and the embedment shall be 76L (1.93 m) and the minimum top of rail height shall be 31 (787).*

**SECTION B-B**

*When connecting Type D guardrail to an impact attenuator, adjust this dimension to match over a distance of 27 6" - 7.62 m from point of connection if necessary.*

**GENERAL NOTES**

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches (millimeters) unless otherwise shown.

**STEEL PLATE BEAM GUARDRAIL**

STANDARD 630001-12
**Steel Plate Beam Guardrail**

**Steel Post Construction**

- **Std. hex nut** Post bolt with steel post.

- **Wedge W250x12.5 or Wedge W500x12.75** Rough sawn timber post.

- Bolt not to extend more than 4 (6) past nut.

**Wood Post Construction**

- **Std. flat washer** with 16d nails toe-nailed to post sawn timber blockout.

- **12x6 (305x152)** Rough sawn timber post. 

**Wood Block-out and Steel Post Details**

- **Four holes each flange.**

- **Post or splice bolt & nut**

  - 4 (102) Dia.
  - Dia. and depth of recess to suit bolt.

**Two-Piece Wood Blockout Option**

- **Std. hex nut** Post bolt with steel post.

- **12x6 (305x152)** Rough sawn timber blockout tow-nailed to post with 160 nails.

**Note:**

- All holes 3/8 (20) dia.
Neutral axis

Traffic

NOTE
Anchor plate T shall be used to attach cable assembly to guardrail when required on traffic barrier terminals.

NOTE
When end shoe is attached to a bridge parapet which has an expansion joint, the bolts shall be provided with a locknut or double nut and shall be tightened only to a point that will allow guardrail movement.

The standard end shoe shall be attached to the concrete with pre-drilled or self-drilling anchor bolts. The anchor cone shall be set flush with the surface of the concrete.

Externally threaded studs protruding from the surface of the concrete will not be permitted.
**GUARDRAIL PLACED BEHIND CURB**

Note: "D" shall not exceed 6 (150 m) for design speeds greater than 45 mph.

**FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED**

**ELEVATION**

**LEAVE-OUT FOR POST WHEN PAVED MATERIAL IS ENCOUNTERED**

**ELEVATION**

<table>
<thead>
<tr>
<th>V</th>
<th>W</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>D ≤ 6 (150)</td>
<td>24 (610)</td>
<td>21 (530)</td>
</tr>
<tr>
<td>6 (150) &gt; D ≥ 6 - 18 (152)</td>
<td>18 (458)</td>
<td>14 (368)</td>
</tr>
<tr>
<td>18 - 31 (468)</td>
<td>12 (305)</td>
<td>8 (203)</td>
</tr>
<tr>
<td>&gt; 31 - 40 (787)</td>
<td>12 (305)</td>
<td>8 (203)</td>
</tr>
<tr>
<td>(&gt; 787) &gt; 40</td>
<td>8 (203)</td>
<td>10 (250)</td>
</tr>
</tbody>
</table>

**PLAN**

- Steel post
- Wood post

- Steel or wood post; (shown)

- Aggregate backfill (CA 11)

- HMA or PCC pavement

- HMA or Controlled Low-strength Material (CLSM)

- Aggregate backfill (CA 11)

**Steel Plate Beam Guardrail**

(Sheet 4 of 4)

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