§ 213.55  Alinement.

Alinement may not deviate from uniformity more than the amount prescribed in the following table:

<table>
<thead>
<tr>
<th>Class of track</th>
<th>The gage must be at least— But not more than—</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excepted track</td>
<td>N/A</td>
</tr>
<tr>
<td>Class 1 track</td>
<td>4&quot;8&quot;</td>
</tr>
<tr>
<td>Class 2 and 3 track</td>
<td>4&quot;8&quot;</td>
</tr>
<tr>
<td>Class 4 and 5 track</td>
<td>4&quot;8&quot;</td>
</tr>
</tbody>
</table>

1 The ends of the line shall be at points on the gage side of the line rail, five-eighths of an inch below the top of the railhead. Either rail may be used as the line rail, however, the same rail shall be used for the full length of that tangential segment of track.

2 The ends of the chord shall be at points on the gage side of the outer rail, five-eighths of an inch below the top of the railhead.

3 N/A—Not Applicable.

§ 213.57  Curves; elevation and speed limitations.

(a) The maximum crosslevel on the outside rail of a curve may not be more than 8 inches on track Classes 1 and 2 and 7 inches on Classes 3 through 5. Except as provided in §213.63, the outside rail of a curve may not be lower than the inside rail. (The first sentence of paragraph (a) is applicable September 21, 1999.)

(b)(1) The maximum allowable operating speed for each curve is determined by the following formula—

\[ V_{\text{max}} = \frac{E_a + 3}{0.0007D} \]

Where—

\( V_{\text{max}} \) = Maximum allowable operating speed (miles per hour).
\( E_a \) = Actual elevation of the outside rail (inches).\(^1\)
\( D \) = Degree of curvature (degrees).\(^2\)

(2) Table 1 of appendix A is a table of maximum allowable operating speed computed in accordance with this formula for various elevations and degrees of curvature.

(c)(1) For rolling stock meeting the requirements specified in paragraph (d) of this section, the maximum operating speed for each curve may be determined by the following formula—

\[ V_{\text{max}} = \frac{E_a + 4}{\sqrt{0.0007D}} \]

Where—

\( V_{\text{max}} \) = Maximum allowable operating speed (miles per hour).
\( E_a \) = Actual elevation of the outside rail (inches).\(^1\)
\( D \) = Degree of curvature (degrees).\(^2\)

(2) Table 2 of appendix A is a table of maximum allowable operating speed average the points through the full length of the body of the curve.

\(^1\) Actual elevation for each 155 foot track segment in the body of the curve is determined by averaging the elevation for 10 points through the segment at 15.5 foot spacing. If the curve length is less than 155 feet,