

(d) For all turnouts and crossovers, and lift rail assemblies or other transition devices on moveable bridges, the track owner shall prepare an inspection and maintenance Guidebook for use by railroad employees which shall be submitted to the Federal Railroad Administration. The Guidebook shall contain at a minimum—

(1) Inspection frequency and methodology including limiting measurement values for all components subject to wear or requiring adjustment.

(2) Maintenance techniques.

(e) Each hand operated switch shall be equipped with a redundant operating mechanism for maintaining the security of switch point position.

**§ 213.355 Frog guard rails and guard faces; gage.**

The guard check and guard face gages in frogs shall be within the limits prescribed in the following table—

Class of track	Guard check gage—The distance between the gage line of a frog to the guard line <sup>1</sup> of its guard rail or guarding face, measured across the track at right angles to the gage line, <sup>2</sup> may not be less than—	Guard face gage—The distance between guard lines, <sup>1</sup> measured across the track at right angles to the gage line, <sup>2</sup> may not be more than—
Class 6 track .....	4'6½"	4'5"
Class 7 track .....	4'6½"	4'5"
Class 8 track .....	4'6½"	4'5"
Class 9 track .....	4'6½"	4'5"

<sup>1</sup> A line along that side of the flangeway which is nearer to the center of the track and at the same elevation as the gage line.  
<sup>2</sup> A line ⅝ inch below the top of the center line of the head of the running rail, or corresponding location of the tread portion of the track structure.

**§ 213.357 Derails.**

(a) Each track, other than a main track, which connects with a Class 7, 8 or 9 main track shall be equipped with a functioning derail of the correct size and type, unless railroad equipment on the track, because of grade characteristics cannot move to foul the main track.

(b) For the purposes of this section, a derail is a device which will physically stop or divert movement of railroad rolling stock or other railroad on-track equipment past the location of the device.

(c) Each derail shall be clearly visible. When in a locked position, a derail shall be free of any lost motion which would prevent it from performing its intended function.

(d) Each derail shall be maintained to function as intended.

(e) Each derail shall be properly installed for the rail to which it is applied.

(f) If a track protected by a derail is occupied by standing railroad rolling stock, the derail shall be in derailing position.

(g) Each derail on a track which is connected to a Class 7, 8 or 9 main track shall be interconnected with the signal system.

**§ 213.359 Track stiffness.**

(a) Track shall have a sufficient vertical strength to withstand the maximum vehicle loads generated at maximum permissible train speeds, cant deficiencies and surface defects. For purposes of this section, vertical track strength is defined as the track capacity to constrain vertical deformations so that the track shall return following maximum load to a configuration in compliance with the vehicle/track interaction safety limits and geometry requirements of this subpart.

(b) Track shall have sufficient lateral strength to withstand the maximum thermal and vehicle loads generated at maximum permissible train speeds, cant deficiencies and lateral alignment defects. For purposes of this section lateral track strength is defined as the track capacity to constrain lateral deformations so that track shall return following maximum load to a configuration in compliance with the vehicle/track interaction safety limits and geometry requirements of this subpart.

**§ 213.361 Right of way.**

The track owner in Class 8 and 9 shall submit a barrier plan, termed a "right-of-way plan," to the Federal Railroad Administration for approval.