## Radial Guardrail

Radial guardrail is w-beam railing that is shop curved when the radius is 150 feet or less.

## Radial end treatments verses radial guardrail:

Radial end treatments shall not be used as they do not reduce the severity of a crash (e.g., between a bridge parapet or guardrail end at a private entrance). A crash tested terminal shall be installed.

Radial guardrail that connects two railing systems around an intersection can be used to close a gap between the two systems that is hazardous. The area within the anticipated dynamic deflection of the guardrail shall be free of fixed objects with a ground slope no steeper than 2:1. (There is a potential for greater deflections due to the possibility of high angle impacts.)


When connecting a bridge parapet to a railing system around an intersection the necessary fixed object attachment shall be installed at the parapet. The guardrail may then connect radial to the intersecting roadways guardrail and shall be terminated with a crash tested terminal. The radius used should be as flat as possible. The recommended minimum radius is 50 feet however site conditions may dictate the need for smaller radii. The absolute minimum radii for guardrail along high speed roadways shall be 30 feet and for low speed roadways shall be 20 feet. If an intersection should require the use of a radius smaller than above contact the Standards/Special Design Section for review, approval and details. Radial guardrail shall not be used on Interstate Highways or High Speed Freeways.

