

Index 820 27" Concrete Parapet with Pedestrian/Bicycle Bullet Railing (Rev. 07/15)

Design Criteria

AASHTO LRFD Bridge Design Specifications; Structures Design Guidelines (SDG)

Design Assumptions and Limitations

The standard height railing is the Pedestrian / Bicycle Railing (42" height). The Special Height Bicycle Railing (48" height) should only be used where warranted by **AASHTO LRFD C13.9.2**.

Index 820 cannot be used as a traffic railing. A crashworthy traffic railing is required between Index 820 and adjacent traffic lanes.

Use this standard in conjunction with Indexes 420, 424, or 425 and 810, 811, 812 or 822.

Plan Content Requirements

In the Structures and / or Roadway Plans:

In the Materials Note on the General Notes Sheet, specify the concrete class in accordance with the superstructure or retaining wall environment classification. See **SDG 1.4**.

Show and label, by name or Index number, the Pedestrian / Bicycle Bullet Railing on the Plan and Elevation, Typical Section, Superstructure, Approach Slab and Finish Grade Elevations Cross Section sheets, Retaining Wall Control Drawings, and other sheets as required. Specify the type of railing required, e.g., Pedestrian / Bicycle Bullet Railing or Special Height Bicycle Bullet Railing. Include cross references to **Design Standards** Index 810, 811, 812 or 822 as appropriate.

All concrete required to construct the parapet and Bars 4P and 4S are included in the Estimated Concrete Parapet Quantities. Do not include parapet concrete in the estimated concrete quantities, or Bars 4P and 4S in the reinforcing bar lists and estimated reinforcing steel quantities for supporting bridge decks, approach slabs or retaining walls.

Payment

Item number	Item description	Unit Measure
521-6-11	27" Concrete Parapet, Pedestrian/Bicycle	LF
515-4-2	Aluminum Bullet Railings, Double Rail	LF